

Access DB# 53131**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: Shahid Alam Examiner #: \_\_\_\_\_ Date: 10/16/01  
 Art Unit: 2172 Phone Number 305-2358 Serial Number: 091465436  
 Mail Box and Bldg/Room Location: 4409 Results Format Preferred (circle): PAPER DISK E-MAIL

**If more than one search is submitted, please prioritize searches in order of need.**

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

*Refus of search 8/6/01*

10/16/01 2:00pm

**STAFF USE ONLY**

	Type of Search	Vendors and cost where applicable
Searcher: <u>A. L. Moore</u>	NA Sequence (#) _____	STN <u>✓</u>
Searcher Phone #: <u>305-0757</u>	AA Sequence (#) _____	Dialog <u>✓</u>
Searcher Location: <u>FIC 5100 4633</u>	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: <u>10/16/01</u>	Bibliographic <u>✓</u>	Dr.Link _____
Date Completed: <u>10/17/01</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>40</u>	Fulltext <u>✓</u>	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>135</u>	Other _____	Other (specify) <u>✓ TUBs</u>

PTO-1590 (1-2000)

175

B 23  
FT-24

File 350:Derwent WPIX 196-2001/UD,UM &UP=200159  
(c) 2001 Derwent Info Ltd  
File 347:JAPIO OCT 1976-2001/JUN(UPDATED 011001)  
(c) 2001 JPO & JAPIO  
File 344:CHINESE PATENTS ABS APR 1985-2001/Aug  
(c) 2001 EUROPEAN PATENT OFFICE

Set	Items	Description
S1	21627	(BACKUP OR BACK?()UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT- E? OR REPLACEMENT? OR SECONDARY) (5N) (SERVER? OR STORAGE OR DA- TA OR FILE OR FILES OR RAID? ? OR DISK(2N)ARRAY?)
S2	79370	TIMESTAMP? OR (TIME OR DAY OR DATE OR HOUR? ? OR MINUTE? ?- ) (3N) (STAMP? OR RECORD? OR NOTE? OR NOTING OR MARK??? OR WRIT- E? OR WRITTEN OR WRITING OR REGISTER? OR INDICAT?)
S3	783808	(REACH? OR LIMIT? OR ACHIEV?) (5N) (CAPACITY OR MAXIMUM) OR - FILL??? OR FULL OR USED()UP
S4	18	S1 AND S2 AND S3
S5	17	S4 NOT SEWAGE/TI

. 5/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent-PIX  
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013881271

WPI Acc No: 2001-365483/200138

XRPX Acc No: N01-266465

**HDD data integrity and performance enhancement via redundant recording in the head load/unload zone**

Patent Assignee: INT BUSINESS MACHINES CORP. (IBM)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
RD 443155	A	20010310	RD 2001443155	A	20010220	200138 B

Priority Applications (No Type Date): RD 2001443155 A 20010220

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
RD 443155	A		G11B-000/00	

Abstract (Basic): RD 443155 A

NOVELTY - Disclosed is a method allowing **full** usage of the load/unload zone and also serving as a secondary read cache with potential for improved seek and latency performance. Current Hard Disk Drives (HDDs) utilizing load/unload technology (eg. ramp load/unload on mobile and IBS's recent server HDDs) do not record data in the zone at the outer diameter (OD) of the recording disks that lies underneath the area where the recording heads are unloaded. The zone is not used due to the concern that the heads may contact the disk during the load or unload operation, which could lead to permanent data loss from disk media damage or thermal erasure. Although the probability of head-disk contact during load/unload is fairly low with the present technology, it is finite and poses a tangible risk with respect to the integrity of customer **data**. The solution is to use **redundant data** recording within this zone (eg. writing data twice, 180 degrees apart; or three times, 120 degrees apart, etc.) to insure that any data loss due to a localized head-disk incident can be recovered by simply reading the **redundant** copy of **data** on the same track. The advantages of this proposal include: 1) Efficient use of currently unusable prime recording real estate. The OD of the disk is the most efficient recording zone and the load/unload zone, which is typically larger than the slider width, could represent a loss of up to 5% of the potential recording area per disk. For a multidisk drive this loss is substantial. 2) Significant improvement in read performance. The latency during read operations is effectively reduced by a factor equal to the number of **redundant** recordings of the **data**. 3) Potential seek performance improvement. If the load/unload zone is used as a **secondary** read cache with the **data** written primarily to the standard disk area, then any subsequent request for the data would trigger a comparison of which track (the primary or the secondary load/unload track) can be reached quicker and also factor in the improved latency of the redundant recording for the optimum device time. 4) A cache strategy can be implemented to target customer data that is most likely to be invoked (eg. most recent data stored, FIFO, etc.). Writing data to this zone can be scheduled during quiescent periods from solid state write cache or from the primary storage track(s) on the disk. This strategy would reduce substantially any customer perceived performance hit due to redundant recording. With this proposed method, using the load/unload zone for recording **data** with **redundancy** provides a significant improvement in **data** robustness against loss due to localized head-disk contact. To illustrate this, let  $P(a)$  be the probability that data is lost on a track at position  $a$  due to head-disk contact. Since head-disk contact is a random, independent event, the probability of a head-disk contact is uniform. To lose data permanently, a second head contact must occur at the position  $a + 180$  degrees for a twice redundant recording. Likewise, head-disk contact would have to occur two more times at  $a + 120$  degrees and  $a + 240$  degrees for permanent **data** loss for a three **time redundant**

recording scheme. Since these events are all uniform and mutually independent, the joint probability from permanent data loss is given by:  $P_{loss} = P(a)^n$  where  $n$  is the number of redundant recordings. Experience has shown that typical head-disk contact with ramp load/unload technology is very low. For example, over a period of 100 load/unload cycles,  $P(a)$  is assumed to be on the order of 10. For a twice redundant recording method, the  $P_{loss}$  is 10 to the power of 14, a number close to a HDD's typical hard error rate. Therefore, using this method of **redundant data** recording in the ramp load/unload zone provides better utilization of a HDD's OD area, with the potential for improved seek and latency performance.

USE - None given.

pp; 0 DwgNo 0/0

Title Terms: DATA; INTEGRITY; PERFORMANCE; ENHANCE; REDUNDANT; RECORD; HEAD ; LOAD; UNLOAD; ZONE

Derwent Class: T03

International Patent Class (Main): G11B-000/00

File Segment: EPI

5/5/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012280841 \*\*Image available\*\*

WPI Acc No: 1999-086947/199908

XRPX Acc No: N99-063341

Information recording method for optical card - involves recording data to free space of data area and corresponding alternate information to management area, when determined that there is free space in data area

Patent Assignee: CANON KK (CANO )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 10320924	A	19981204	JP 97131007	A	19970521	199908 B

Priority Applications (No Type Date): JP 97131007 A 19970521

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 10320924	A	12	G11B-020/12	

Abstract (Basic): JP 10320924 A

The method involves using an optical card (1) which has a data area and alternative area for recording data, and a management area (4) for recording alternate information containing substitution origin and end addresses. When the data area is **full**, data are recorded in a free space of the alternative area and corresponding alternate information are recorded in the management area.

When the alternative area is **full**, it is determined whether there is any free space in the data area. Data are recorded in the free space of the data area and corresponding alternation information is recorded to the management area when determined that there is free space in the data area.

ADVANTAGE - Shortens SCSI command executing **time**. Performs alternate information **recording** simply.

Dwg.2/14

Title Terms: INFORMATION; RECORD; METHOD; OPTICAL; CARD; RECORD; DATA; FREE ; SPACE; DATA; AREA; CORRESPOND; ALTERNATE; INFORMATION; MANAGEMENT; AREA ; DETERMINE; FREE; SPACE; DATA; AREA

Derwent Class: T03; W04

International Patent Class (Main): G11B-020/12

International Patent Class (Additional): G11B-007/00; G11B-019/02;

G11B-020/10; G11B-027/00

File Segment: EPI

5/5/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011815896 \*\*Image available\*\*

WPI Acc No: 1998-232806/199821

XRPX Acc No: N98-184441

**Method of retroactively backing up file in computer system - involves timestamping new save set with date corresponding to backup date of most recent one of identified save sets having files eligible for backup**

Patent Assignee: DIGITAL EQUIP CORP (DIGI )

Inventor: SAXON P D

Number of Countries: 024 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 838758	A2	19980429	EP 97118557	A	19971024	199821 B
US 5758359	A	19980526	US 96736450	A	19961024	199828

Priority Applications (No Type Date): US 96736450 A 19961024

Cited Patents: No-SR.Pub

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 838758	A2	E	17	G06F-011/14	
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Designated States (Regional): AL AT BE CH DE DK ES FI FR GB GR IE IT LI  
LT LU LV MC NL PT RO SE SI

US 5758359	A	G06F-017/30
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Abstract (Basic): EP 838758 A

The method involves establishing a backup schedule employing backup levels with predetermined selection criteria associated. The associated selection criteria operates to define a point through which the backup at the backup level with which the selection criteria is associated is to be taken. Attributes are associated with each save set and each **file** stored and a **backup** is scheduled is detected to occur. An established level of the scheduled backup is determined and any save sets created since a last lower level save set or last same level save set are identified if an established level of the scheduled retroactive backup is the lowest level. The selection criteria associated with the established level of the scheduled backup is read. The identified save sets has **files** eligible for **backup** by testing the attributes associated with the files against the selection criteria until the selection criteria is satisfied. The new save set is **timestamped** with a date corresponding to the backup date of the most recent one of the identified save sets having **files** eligible for **backup**.

ADVANTAGE - Mitigates impact of back-up time associated with normally time-consuming **full** backup.

Dwg.3a/5

Title Terms: METHOD; BACKING; UP; FILE; COMPUTER; SYSTEM; NEW; SAVE; SET; DATE; CORRESPOND; DATE; RECENT; ONE; IDENTIFY; SAVE; SET; FILE

Derwent Class: T01; U21

International Patent Class (Main): G06F-011/14; G06F-017/30

File Segment: EPI

5/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010956133 \*\*Image available\*\*

WPI Acc No: 1996-453083/199645

XRPX Acc No: N96-382198

**Image data storage method for automatic fee place in highways - involves storing image in mass image memory only after secondary memory is filled with images completely**

Patent Assignee: HITACHI LTD (HITA )

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8228337	A	19960903	JP 9532025	A	19950221	199645 B

.JP 3191596 B2 200107 JP 9532025 A 19950221 00143

Priority Applications (No Type Date): JP 9532025 A 19950221

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8228337	A		16	H04N-007/18	
JP 3191596	B2		15	H04N-007/18	Previous Publ. patent JP 8228337

Abstract (Basic): JP 8228337 A

The method involves using a first camera (5) which picks up image of a passing vehicles. A second camera (6) picks up image of the vehicle including the driver's seat. The outputs of the two cameras are fed to an image processing part (7). The image taken by the first camera is temporarily stored in a primary memory (2).

When an abnormal vehicle is detected, the image stored in the primary memory is transferred to a secondary memory (3). A mass image memory (4) stores the images taken by the camera only after the **storage** capacity of the **secondary** memory is extinguished completely.

ADVANTAGE - Picks up images of vehicle even moving at high speed. Saves memory space considerably. Reduces operation **time** of image **record** part.

Dwg.1/12

Title Terms: IMAGE; DATA; STORAGE; METHOD; AUTOMATIC; FEE; PLACE; HIGHWAY; STORAGE; IMAGE; MASS; IMAGE; MEMORY; AFTER; SECONDARY; MEMORY; **FILLED** ; IMAGE; COMPLETE

Index Terms/Additional Words: VTR

Derwent Class: S02; T01; T07; W02; W04

International Patent Class (Main): H04N-007/18

International Patent Class (Additional): G01B-011/24; G06T-001/00;

G06T-001/60; G08G-001/04; H04N-005/907

File Segment: EPI

5/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010173582 \*\*Image available\*\*

WPI Acc No: 1995-074835/199510

XPX Acc No: N95-059337

**Memory card with two SRAM arrays with different data holding up voltages and power back- up - has second volatile memory device for storing attribute data which includes volatile memory backed- up by prim cell and full CMOS type memory element**

Patent Assignee: MITSUBISHI DENKI KK (MITQ )

Inventor: SANEMITSU Y

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5384748	A	19950124	US 93130876	A	19931004	199510 B

Priority Applications (No Type Date): JP 92268953 A 19921007

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5384748	A		8	G11C-011/412	

Abstract (Basic): US 5384748 A

The memory card includes a first volatile memory device for storing data and having min data holding voltage, a second volatile memory is for storing at least attribute data concerning attributes of the memory card. The second volatile memory cells have a min data holding voltage lower than that of the first volatile memory device.

The memory card also incorporates a signal transmission device for transmitting data, address and control signals between the first and second volatile memory devices and an external device. The control device is connected to the signal transmission device for selectively setting the first and second volatile memory devices in operable state in response to a signal from the external device.

USE/ADVANTAGE - Static random access memory card which stores attribute data associated with itself. Shorter **writing** time of memory element for storing attribute data and reduced production cost.

Dwg.3/6

Title Terms: MEMORY; CARD; TWO; SRAM; ARRAY; DATA; HOLD; UP; VOLTAGE; POWER ; BACK; UP; SECOND; VOLATILE; MEMORY; DEVICE; STORAGE; ATTRIBUTE; DATA; VOLATILE; MEMORY; BACK; UP; PRIMARY; CELL; **FULL** ; CMOS; TYPE; MEMORY; ELEMENT

Derwent Class: T01; U14

International Patent Class (Main): G11C-011/412

International Patent Class (Additional): G11C-011/417

File Segment: EPI

5/5/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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007786968

WPI Acc No: 1989-052080/198907

**Series parallel charge coupled semiconductor memory - is used in video equipment to store digitised picture data using clocked electrodes**

Patent Assignee: PHILIPS GLOEILAMPENFAB NV (PHIG )

Number of Countries: 013 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
NL 8701110	A	19881201	NL 871110	A	19870511	198907 B
EP 291118	A	19881117	EP 88200875	A	19880504	198907
AU 8815841	A	19881117				198911
JP 1033968	A	19890203	JP 88112708	A	19880511	198911
CN 8802808	A	19881130				198946
US 4878202	A	19891031	US 88187612	A	19880428	199002

Priority Applications (No Type Date): NL 871110 A 19870511

Cited Patents: No-SR.Pub

Patent Details:

Patent No	Kind	Lan	Pg	Main	IPC	Filing	Notes
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NL 8701110	A		17				
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EP 291118	A	E					
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Designated States (Regional): AT CH DE FR GB IT LI NL SE

US 4878202	A		9				
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Abstract (Basic): NL 8701110 A

A series signal source is connected to a series input register. Across the register are an input gate and clocked electrodes. The clocked electrodes are **alternate storage** electrodes and transfer electrodes. The register contents are transferred down the parallel section of the memory, via a transfer gate, each **time** a circuit **indicates** when the input register is **full** .

At the bottom of the parallel section is the series output register which feeds the signals out via an output amplifier.

USE/ADVANTAGE - Stores one or more interlaced lines of digitised video signal data. Compact and inexpensive.

0/7

Title Terms: SERIES; PARALLEL; CHARGE; COUPLE; SEMICONDUCTOR; MEMORY; VIDEO ; EQUIPMENT; STORAGE; DIGITAL; PICTURE; DATA; CLOCK; ELECTRODE

Derwent Class: U13; U14; W04

International Patent Class (Additional): G11C-019/28; G11C-027/00;

H01L-027/10; H01L-029/76; H04N-005/90

File Segment: EPI

5/5/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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004025594

WPI Acc No: 1984-171136/198427

.XRPX Acc No: N84-127555

**Memory back-up system for fault-tolerant computer - stores all data modified under program control, temporary in non-write-through cache associated with the control processor**

Patent Assignee: SEQUOIA SYSTEMS INC (SEQU-N)

Inventor: BUDWEY M J; NOLAN J M; STIFFLER J J

Number of Countries: 013 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8402409	A	19840621	WO 83US1970	A	19831209	198427 B
AU 8322262	A	19840614				198431
EP 128945	A	19841227	EP 83900358	A	19831209	198501
CA 1210157	A	19860819				198638
US 4654819	A	19870331	US 85750652	A	19850628	198715
US 4819154	A	19890404	US 86937978	A	19861204	198916
EP 128945	B	19910130				199105
DE 3382152	G	19910307				199111

Priority Applications (No Type Date): US 82448419 A 19821209; US 85750652 A 19850628

Cited Patents: FR 2346772; GB 1369059; US 3760364; US 4020466; US 4044337; US 4159517; US 4164017; 2.Jnl.Ref; GB 1639059

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 8402409	A	E 100		

Designated States (Regional): AT BE CH DE FR GB LU NL SE

EP 128945 A E

Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

EP 128945 B

Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

Abstract (Basic): EP 128945 A

A memory backup apparatus for a fault-tolerant multi-tasking computer system having a processing element which generates task control signals for controlling the system during a context switch; a first memory area and a second, physically separate memory area for storing **duplicate** copies of **data** and subsequent computational results generated by the processing element; a temporary storage area(250) associated with the processing element, the storage area generating a **full** signal when a predetermined number of locations in the storage area have been written to; a memory control circuit (245) for controlling transfers between the temporary storage area, the first memory area and the second memory area; and a fault signal, characterized in that the memory control circuit (245) is such as to write selected portions of the temporary storage area comprising computational results into the memory area in response to the **full** signal or the task control signals and to write the same selected portions of the temporary storage area into the second memory area after the writing of data from the temporary storage area into the first memory area has been completed and no fault condition has been detected, and, in case of a fault condition using the last portions of the first or second memory area non affected by the fault condition as restart information. (46pp)

Title Terms: MEMORY; BACK; UP; SYSTEM; FAULT; TOLERATE; COMPUTER; STORAGE; DATA; MODIFIED; PROGRAM; CONTROL; TEMPORARY; NON; WRITING; THROUGH; CACHE; ASSOCIATE; CONTROL; PROCESSOR

Derwent Class: T01

International Patent Class (Additional): G06F-011/14; G06F-013/00; G06Z-011/16

File Segment: EPI

5/5/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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003241859

WPI Acc No: 1982-A2739E/198202



Real-time error correction for multitrack magnetic memory processes data in parallel on more than one channel using either full or abbreviated fire code

Patent Assignee: THOMSON CSF (CSFC )

Inventor: DECOUASNON T

Number of Countries: 005 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 42776	A	19811230				198202 B
FR 2485237	A	19811224				198205
US 4486881	A	19841204	US 81274382	A	19810617	198451

Priority Applications (No Type Date): FR 8013597 A 19800619

Cited Patents: 6.Jnl.Ref; US 3439331; US 4052698

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 42776	A	F 20		

Designated States (Regional): DE GB NL

Abstract (Basic): EP 42776 A

Two levels of correction are established from **redundancy** bits added to the transmitted **data** . One mode of correction of short errors (1 to 7 per packet) uses bits introduced by the data processor before recording by an abbreviated Fire code, series bits being grouped in blocks of 180 to which 20 dependent redundancy bits are appended.

The other mode of correction of long errors (8 to 512 per packet) uses parity bits, recorded on at least one reserved track, resulting from coding of parallel bits to be **recorded** at the same **time** . An assembly of decoders provides data corrected from the Fire code bits which are substituted as required for the data stored in a memory. When the errors in a block in one channel are too long for such correction, two parity calculators in association with multiplexers allow the erroneous bits to be corrected.

Title Terms: REAL-TIME; ERROR; CORRECT; MULTITRACK; MAGNETIC; MEMORY; PROCESS; DATA; PARALLEL; MORE; ONE; CHANNEL; **FULL** ; ABBREVIATE; FIRE; CODE

Derwent Class: T01; T03; W01

International Patent Class (Additional): G06F-011/10; G11B-005/09

File Segment: EPI

5/5/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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001332267

WPI Acc No: 1975-M6197W/197547

**Resource balancing system - designed for multi-programming systems with virtual memory and paging allocation**

Patent Assignee: IBM CORP (IBMC )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 940017	H	19751104				197547 B

Priority Applications (No Type Date): US 74450622 A 19740313

Abstract (Basic): US 940017 H

A virtual memory system includes a main memory which accommodates several jobs on a time shared basis. When a job requires **data** not in the main memory, **secondary** memory is accessed by means of a signal known as a page fault. A list (stack) of page faults and their real **time** is **recorded** . At the **time** of each fault, the elapsed time for a **full** stack of faults is calculated and tested to find whether it exceeds a maximum. If so, a new job is then added to the jobs being performed by the system. If the elapsed time is less than a minimum, then the job with the earliest promotion time is demoted from the jobs being performed.

Title Terms: RESOURCE; BALANCE; SYSTEM; DESIGN; MULTI; PROGRAM; SYSTEM;

VIRTUAL; MEMORY; PAGE; LOCATE  
Derwent Class: T01  
International Patent Class (Additional): G06F-009/18  
File Segment: EPI

5/5/10 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06800681 \*\*Image available\*\*  
**RECORDING TIME** EXTENDING METHOD FOR **RECORDING** MEDIUM

PUB. NO.: 2001-028164 [JP 2001028164 A]  
PUBLISHED: January 30, 2001 (20010130)  
INVENTOR(s): SHIMIZU KYOICHI  
APPLICANT(s): VICTOR CO OF JAPAN LTD  
APPL. NO.: 11-199174 [JP 99199174]  
FILED: July 13, 1999 (19990713)  
INTL CLASS: G11B-020/10; G06F-012/02; H04N-005/915

#### ABSTRACT

PROBLEM TO BE SOLVED: To extend **recording time** by thinning stored **recording** information at equal intervals and recording new information in an opened partial recording area.

SOLUTION: Analog audio signals inputted to an input terminal IN are sampled, digitized by an A/D converter (A/D) 2 and stored in a shift register (SRI) 4 for input as a data stream (a). When this data stream becomes a prescribed quantity, it is stored through a parallel port (PP) 8P into the prescribed address of a memory (MEM) 8 under the control of an address controller (ADRS-CNT) 8A and it is repeated until that address is **filled**. After the address is **filled**, when signals are further inputted, concerning these signals, the data stream (a) to be overwritten on the SRI 4 is read out of the MEM 8 and a new thinned data stream is reentered to the SRI 4 under the control of the ADRS-CNT 6. A signal stream (b) in the A/D 2 is thinned by reducing band areas by half in comparison with initial one and overwritten so as to be **alternately** mixed with the **data** (a).

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5/5/11 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06233740 \*\*Image available\*\*  
FLASH MEMORY SYSTEM

PUB. NO.: 11-175311 [JP 11175311 A]  
PUBLISHED: July 02, 1999 (19990702)  
INVENTOR(s): KAKINUMA YUJI  
APPLICANT(s): TDK CORP  
APPL. NO.: 09-352165 [JP 97352165]  
FILED: December 05, 1997 (19971205)  
INTL CLASS: G06F-005/06; G06F-013/38

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a flash memory system capable of an operation at a high speed with less delay of **write /read time**.

SOLUTION: This system is provided with a bus interface 2 connected to a host computer 1, a flash memory interface for performing write/read to a flash memory 5 and a data relay means 3 for relaying data sent out from the side of the host computer 1 to the side of the flash memory 5 and the data sent out from the side of the flash memory 5 to the side of the host computer 1 and adjusting the data transfer speed of the host computer 1 and the flash memory 5. The data relay means 3 is provided with two buffers A

, and B for temporarily storing the **data** of a prescribed length, **alternately** stores the **data** sent out from the side of the host computer 1 or the side of the flash memory 5 in the two buffers A and B and **alternately** sends out the **data** from the buffer filled with the data to the side of the flash memory 5 or the side of the host computer 1.

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5/5/12 (Item 3 from file: 347)

DIALOG(R)File 347:JAPIO

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04070115 \*\*Image available\*\*

SIMULATION PROCESSOR FOR RECORDING/REPRODUCTION

PUB. NO.: 05-061815 [JP 5061815 A]

PUBLISHED: March 12, 1993 (19930312)

INVENTOR(s): NOGAMI TSUGIO

FUJIYAMA KENJI

SERIKAWA KAZUNORI

APPLICANT(s): NIPPON STEEL CORP [000665] (A Japanese Company or Corporation), JP (Japan)

TAIHEI KOGYO CO LTD [401864] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 03-253062 [JP 91253062]

FILED: September 04, 1991 (19910904)

INTL CLASS: [5] G06F-013/36; G06F-015/74

JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)

JOURNAL: Section: P, Section No. 1574, Vol. 17, No. 381, Pg. 147, July 16, 1993 (19930716)

#### ABSTRACT

PURPOSE: To execute the simultaneous processing of recording/reproduction on multiple pieces of data through the use of a **recording** medium having seek **time** restriction.

CONSTITUTION: Multiple pieces of input data are sequentially sampled by a multiplexer 3 at 10m sec, and they are alternately written into memories 2a and 2b at every 10m sec. Written **data** are **alternately** written into memories 4a and 4b having the storage capacity of 1000m sec till they are **filled**. Then, they are transferred to a hard disk 6 so as to record/reproduce high speed. Thus, recording from one memory into the hard disk terminates, and a reproduction processing can be executed till recording from the other memory is started. Thus, input data can be fetched on a real **time** basis while **recording** is executed by using a multi-bus for a data transfer means from the memory to the memory.

5/5/13 (Item 4 from file: 347)

DIALOG(R)File 347:JAPIO

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03840802 \*\*Image available\*\*

DIGITAL DATA RECORDER

PUB. NO.: 04-205902 [JP 4205902 A]

PUBLISHED: July 28, 1992 (19920728)

INVENTOR(s): MUKAI MAMORU

APPLICANT(s): ASAMA EREKURAFUTO KK [000000] (A Japanese Company or Corporation), JP (Japan)

TAKAMISAWA CYBERNETICS CO LTD [358835] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 02-330669 [JP 90330669]

FILED: November 30, 1990 (19901130)

INTL CLASS: [5] G11B-005/02; G11B-015/02; G11B-015/087; G11B-025/10

JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment)

JAPIO KEYWORD:R101 (APPLIED ELECTRONICS -- Video Tape Recorders, VTR); R131  
(INFORMATION PROCESSING -- Microcomputers & Microprocessors)  
JOURNAL: Section: P, Section No. 1453, Vol. 16, No. 551, Pg. 24,  
November 20, 1992 (19921120)

#### ABSTRACT

PURPOSE: To perform analysis with one of memory cards taken out when a measuring data required for analysis is generated by providing a magnetic tape recording device as a long time recording device for recording for a long time and, on the other hand, two exchangeable sets of memory card devices for alternate recording for a short time .

CONSTITUTION: The subject device is provided with the long time recording device 3 for performing a long time recording and the two sets of the short time recording devices 4 and 4' capable of performing a short time recording alternately and exchanging one for the other. Then, a measuring data of, for instance, a sampled seismic wave, etc., is stored in a memory card inserted into the memory card device 4, and when this memory card is filled up, the storing of the measuring data is stopped, and alternately the memory card inserted into the memory card device 4' is started to be stored with the measuring data. Afterward, the data of its filled memory card is transferred to a digital audio tape(DAT) recording device 3 to be recorded on a magnetic tape. By this method, when an emergency arises, either of the memory cards is taken out to perform its analysis.

5/5/14 (Item 5 from file: 347)

DIALOG(R)File 347:JAPIO

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03805663 \*\*Image available\*\*  
DIGITAL DATA RECORDING/REPRODUCING DEVICE

PUB. NO.: 04-170763 [JP 4170763 A]  
PUBLISHED: June 18, 1992 (19920618)  
INVENTOR(s): OKABE MASAO  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company  
or Corporation), JP (Japan)  
APPL. NO.: 02-295269 [JP 90295269]  
FILED: November 02, 1990 (19901102)  
INTL CLASS: [5] G11B-020/10; G06F-003/06  
JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment); 45.3 (INFORMATION PROCESSING  
-- Input Output Units)  
JAPIO KEYWORD:R131 (INFORMATION PROCESSING -- Microcomputers &  
Microprocessors)  
JOURNAL: Section: P, Section No. 1431, Vol. 16, No. 481, Pg. 72,  
October 06, 1992 (19921006)

#### ABSTRACT

PURPOSE: To enable reproduction to be in disabled state and security of data to be retained positively by disabling correction when performing error correction as far as no proper keyword data is set at the time of reproduction.

CONSTITUTION: Data conversion is performed to an entire coded data where error correction coding processing is performed and redundancy data is added and it is recorded on a tape. At the time of reproduction, a coded data which should have been recorded is restored by performing inverse conversion with the same keyword as a conversion keyword which is used at the time of recording . When a keyword data which is different from the keyword data which is set at the time of recording is set at the time of reproduction, original coded data cannot be retrieved when performing inverse conversion of data and it becomes quite meaningless data as an error correction symbol so that a situation, where errors occur in nearly all data, occurs when correcting errors, a read processing exceeding the limit of correction capacity is performed, no proper reproduction is made regardless of reading, and error messages are returned to an external

, device as disabled reproduction, thereby completing reproduction.

5/5/15 (Item 6 from file: 347)

DIALOG(R)File 347:JAPIO

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02958326 \*\*Image available\*\*

TIME SERIES DATA BASE SYSTEM

PUB. NO.: 01-255926 [JP 1255926 A]

PUBLISHED: October 12, 1989 (19891012)

INVENTOR(s): NAOE HIDENORI

SASAKI TOSHIRO

MATSUMOTO KUNIAKI

KOSAKA MITSUTAKA

APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
(Japan)

APPL. NO.: 63-082926 [JP 8882926]

FILED: April 06, 1988 (19880406)

INTL CLASS: [4] G06F-007/28; G06F-012/00; G06F-012/00

JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units);  
45.2 (INFORMATION PROCESSING -- Memory Units)

JOURNAL: Section: P, Section No. 986, Vol. 14, No. 4, Pg. 78, January  
09, 1990 (19900109)

#### ABSTRACT

PURPOSE: To efficiently control a time series data base by storing the data of the time series with the time and attribute as a parameter, to a secondary memory.

CONSTITUTION: In a **secondary** memory 1, time series **data** are stored into the part specified by as time (t) and an attribute C. When the time and attribute of an input output device 2 are designated, the control part B **write** the designated **time** series data in a part A of the input output device 2. Plural relational data bases are supplied to the time series data and with the data base, the inquiry can be executed for the data written in the part A. When the inside of the secondary memory 1 is **filled**, the oldest data are eliminated, and the storing area of the time series data transmitted newly is formed.

5/5/16 (Item 7 from file: 347)

DIALOG(R)File 347:JAPIO

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02580165 \*\*Image available\*\*

IMAGE FILING DEVICE

PUB. NO.: 63-197065 [JP 63197065 A]

PUBLISHED: August 15, 1988 (19880815)

INVENTOR(s): SAGO MASAKI

APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP  
(Japan)

APPL. NO.: 62-029047 [JP 8729047]

FILED: February 10, 1987 (19870210)

INTL CLASS: [4] G11B-020/10; H04N-001/21; G06F-015/62

JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment); 44.7 (COMMUNICATION --  
Facsimile); 45.4 (INFORMATION PROCESSING -- Computer  
Applications)

JAPIO KEYWORD: R090 (PRECISION MACHINES -- Microforms); R102 (APPLIED  
ELECTRONICS -- Video Disk Recorders, VDR); R131 (INFORMATION  
PROCESSING -- Microcomputers & Microprocessors); R138  
(APPLIED ELECTRONICS -- Vertical Magnetic & Photomagnetic  
Recording)

JOURNAL: Section: P, Section No. 801, Vol. 12, No. 480, Pg. 145,  
December 15, 1988 (19881215)

#### ABSTRACT

PURPOSE: To make the **registering** of the present **time** **successful** even if the registering is **delayed** by executing the interrupting/restarting of image input according to the speed of storing images in case of inputting an image from an image input means and storing the input image in an image storage means through an image temporary storage means.

CONSTITUTION: When a scanner 16 begins to read the image, a scanner printer interface (SP-I/F) 14 **alternately** stores image **data** transferred from the scanner 16 in memories for image 40 and 41. When either image memory 40 or 41 is **full** of the data, the SP-I/F 14 informs it to a microprocessing unit (MPU) 6 by means of interruption. When the SP-I/F 14 receives the instruction of interrupting a read and the indication of restarting a read from the MPU 6 in the midst of reading the image, the SP-I/F 14 transmits them to the scanner 16 so as to execute the interrupting and restarting the read. Even if there is not a memory equivalent to one page of images, the registering of the read of image can be executed without any delay, so that the up of working efficiency and the lowering of cost can be enhanced.

5/5/17 (Item 8 from file: 347)

DIALOG(R)File 347:JAPIO

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01578961 \*\*Image available\*\*  
SORTING PROCESSOR

PUB. NO.: 60-057461 [JP 60057461 A]  
PUBLISHED: April 03, 1985 (19850403)  
INVENTOR(s): KAWADA TADAMICHI  
TAKAHASHI YUKIO  
YAMANE MICHIIRO  
APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese  
Company or Corporation), JP (Japan)  
APPL. NO.: 58-165267 [JP 83165267]  
FILED: September 09, 1983 (19830909)  
INTL CLASS: [4] G06F-015/16  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)  
JOURNAL: Section: P, Section No. 378, Vol. 09, No. 190, Pg. 9, August  
07, 1985 (19850807)

#### ABSTRACT

PURPOSE: To attain the high-speed sorting despite different numbers of data be sorted and held by each element by providing plural detecting means and storing or ring-shifting them **alternately** to an idle **data** register.

CONSTITUTION: Sorting control circuits 51, 52 and 5n compare data within data within data registers RA and RB to rearrange them and also store the data within memories 21, 22 and 2n to idle registers RA and RB. At the same **time**, the data within **registers** RA and RB are ring-shifted repetitively and synchronously with all processing units 11, 12 and 1n. When the data to be sorted are stored to registers RA and RB or these registers are **filled**, a signal line 1150 is set at '1' via detecting means 900 and 1000. Thus the actions are stopped to store the data to be sorted to registers RA and RB, and parallel sorting actions are started. This ensures the effective use of both registers RA and RB. Thus the sorting time is decreased and the high-speed processing is possible.

File 348:EUROPEAN PATENTS 1978-2001/Oct W01

(c) 2001 European Patent Office

File 349:PCT Fulltext 1983-2001/UB=20011011,UT=20011004

(c) 2001 WIPO/Univentio

Set	Items	Description
S1	17437	(BACKUP OR BACK?()UP OR REDUNDAN? OR DUPLICAT? OR REPLACEM- ENT? OR SECONDARY) (5N) (SERVER? OR STORAGE OR DATA OR FILE OR - FILES OR RAID? ? OR DISK(2N)ARRAY?)
S2	64792	TIMESTAMP? OR (TIME(NOT 2N)REAL OR DAY OR DATE OR HOUR? OR MINUTE?) (2N) (STAMP? OR RECORD? OR NOTE? OR NOTING OR MARK??? - OR WRITE? OR WRITING OR WRITTEN OR REGISTER? OR INDICAT?)
S3	432777	(REACH? OR LIMIT? OR ACHIEV?) (5N) (CAPACITY OR MAXIMUM) OR - FILL??? OR FULL OR USED()UP
S4	110	S1(S)S2(S)S3
S5	5620	(BACKUP OR BACK?()UP OR REDUNDAN? OR DUPLICAT? OR SECONDAR- Y) (5N) (SERVER? OR STORAGE OR RAID? ? OR DISK(2N)ARRAY?)
S6	42	S5(S)S2(S)S3
S7	71587	(REACH? OR LIMIT? OR ACHIEV? OR FULL OR FILL??? OR (USED OR USING) ()UP) (5N) (CAPACITY OR MAXIM?)
S8	109340	(SPACE? ? OR AREA? ?) (3N) (FULL OR USED OR FILLED) OR S7
S9	28	S8(S)S5(S)S2
S10	25	S9 NOT (PIPELINE? OR PROTEIN? ? OR POLYPEPTIDE?)/TI

10/3,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00996862

**Start code detecting apparatus for video data stream**  
**Vorrichtung zur Startkodedetektierung für Videodatenstrom**  
**Appareil de detection de code de depart pour un flux de donnees video**  
PATENT ASSIGNEE:

Discovision Associates, (260275), 2355 Main Street, Suite 200, Irvine, CA  
92614, (US), (Applicant designated States: all)

INVENTOR:

Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol BS16 1NA,  
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Sotheran, Martin William, The Ridings, Wick Lane Stinchcombe, Dursley,  
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Robbins, William Philip, 19 Springhill, Cam, Gloucestershire GL11 5PE,  
(GB)

Finch, Helen Rosemary, Tyley, Coombe, Wotton-under-edge, Gloucester GL12  
7ND, (GB)

Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)

LEGAL REPRESENTATIVE:

Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,  
rue Louis Chirpaz, 69131 Ecully Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 901287 A2 990310 (Basic)  
EP 901287 A3 990922

APPLICATION (CC, No, Date): EP 98202166 950228;

PRIORITY (CC, No, Date): GB 9405914 940324

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL

RELATED PARENT NUMBER(S) - PN (AN):

EP 674443 (EP 95301301)

INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38

ABSTRACT WORD COUNT: 112

NOTE:

Figure number on first page: 61

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9910	191
SPEC A	(English)	9910	126718
Total word count - document A			126909
Total word count - document B			0
Total word count - documents A + B			126909

...SPECIFICATION stages in the pipeline are afforded enhanced flexibility in configuration and processing.

Each of the processing stages in the pipeline may include both primary and **secondary storage**, and the stages in the pipeline are reconfigurable in response to recognition of selected tokens. The tokens in the pipeline are dynamically adaptive and may...coded data. MPEG can use both these techniques.

In accordance with the present invention, MPEG/JPEG blocks of user and extension data preceded by start/**marker** codes can be detected by the Start Code Detector. H.261/MPEG "extra information" is detected by the Huffman decoder of the present invention. See...has two sets of registers that define two similar buffers. The buffer limit register (buffer(underscore)limit) defines the physical upper limit of the memory **space**. All addresses are calculated modulo this number.

Within the limits of the available memory, the extent of each buffer is defined by two registers: the...

10/3,K/2 (Item 2 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00996861



**Multistandard decoder for Huffman codes**  
**Mehrnormendekodierer für Huffmancodes**  
**Decodeur multistandard de codes de Huffman**

**PATENT ASSIGNEE:**

Discovision Associates, (260275), 2355 Main Street, Suite 200, Irvine, CA  
92614, (US), (applicant designated states:  
AT;BE;CH;DE;FR;GB;IE;IT;LI;NL)

**INVENTOR:**

Wise, Adrian Philip, 10 Westbourne Cottages, Frenchhay, Bristol BS16 1NA,  
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Sotheran, Martin William, The Riddin gs, Wick Lane Stinchcombe, Dursley,  
GLoucestershire GL11 6BD, (GB)  
Robbins, William Philip, 19 Sprin ghill, Cam, Gloucestershire GL11 5PE,  
(GB)  
Finch, Helen Rosemary, Tyley,Coombe, Wotton-Under-Edge, Gloucester GL12  
7ND, (GB)  
Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)

**LEGAL REPRESENTATIVE:**

Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,  
rue Louis Chirpaz, 69131 Ecully Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 901286 A1 990310 (Basic)

APPLICATION (CC, No, Date): EP 98202135 950228;

PRIORITY (CC, No, Date): GB 9405914 940324

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL

RELATED PARENT NUMBER(S) - PN (AN):

EP 674443 (EP 953013018)

INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38;

ABSTRACT WORD COUNT: 155

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9910	390
SPEC A	(English)	9910	126718
Total word count - document A			127108
Total word count - document B			0
Total word count - documents A + B			127108

...SPECIFICATION stages in the pipeline are afforded enhanced flexibility  
in configuration and processing.

Each of the processing stages in the pipeline may include both primary  
and **secondary storage**, and the stages in the pipeline are  
reconfigurable in response to recognition of selected tokens. The tokens  
in the pipeline are dynamically adaptive and may...coded data. MPEG can  
use both these techniques.

In accordance with the present invention, MPEG/JPEG blocks of user and  
extension data preceded by start/**marker** codes can be detected by the  
Start Code Detector. H.261/MPEG "extra information" is detected by the  
Huffman decoder of the present invention. See...has two sets of registers  
that define two similar buffers. The buffer limit register  
(buffer(underscore)limit) defines the physical upper limit of the memory  
**space**. All addresses are calculated modulo this number.

Within the limits of the available memory, the extent of each buffer is  
defined by two registers: the...

10/3,K/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00939568

**DISK ARRAY SUBSYSTEM**

**ANORDNUNGSUNTERSISTEM FÜR SPEICHERPLATTEN**

**SOUS-SYSTEME A PILES DE DISQUES**

**PATENT ASSIGNEE:**

Hitachi, Ltd., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo  
101, (JP), (Applicant designated States: all)

**INVENTOR:**

KOMACHIYA, Tsunetaka, 1-1-1, Machi Shinwaryo A-305, 6-1, Shiroburi,  
 Odawara-shi, Kanagawa 250, (JP)  
 KAMO, Yoshihisa, 2-38-22, Shinmei, Musashimurayama-shi, Tokyo 208, (JP)  
 YAMAMOTO, Akira, 6-5-61, Wakamatsu, Sagamihara-shi, Kanagawa 229, (JP)  
 LEGAL REPRESENTATIVE:  
 Strehl Schubel-Hopf & Partner (100941), Maximilianstrasse 54, 80538  
 Munchen, (DE)  
 PATENT (CC, No, Kind, Date): EP 986000 A1 000315 (Basic)  
 WO 9812621 980326  
 APPLICATION (CC, No, Date): EP 96931271 960920; WO 96JP2718 960920  
 DESIGNATED STATES: DE; FR; GB  
 INTERNATIONAL PATENT CLASS: G06F-003/06  
 ABSTRACT WORD COUNT: 125  
 NOTE:  
 Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; Japanese  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200011	1286
SPEC A	(English)	200011	3967
Total word count - document A			5253
Total word count - document B			0
Total word count - documents A + B			5253

...SPECIFICATION data in the parity data area B109 have been duplexed. Fig. 6 shows data arrangement in the disk array subsystem after the change.  
 The conventional **disk array** subsystem required, when changing the **redundancy** method from parity to mirror, that the DKC 102 further copy the data blocks into the mirror data area of another drive after the second...  
 ...can dispense with the step of copying the data blocks from one mirror data area to another since the data blocks in the parity data **area** themselves are **used** as one group of the duplexed data. The conventional disk array subsystem required that five drives be exclusively used and that three times of reading...  
 ...blocks 9, 10 and 11 from parity to mirror by requiring that four drives be used and that three times of reading and a single **time** of **writing** be made as shown in Fig. 5. As a result, the subsystem according to the present invention can reduce the utilization rate of its drives and...

10/3,K/4 (Item 4 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
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00711606

**Start code detector for image sequences**  
**Detektor für den Startcode von Bildsequenzen**  
**Detecteur de code de départ pour séquences d'images**  
 PATENT ASSIGNEE:

DISCOVISION ASSOCIATES, (260273), 2355 Main Street Suite 200, Irvine, CA 92714, (US), (Proprietor designated states: all)  
 INVENTOR:  
 Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol BS16 1NA, (GB)  
 Sotheran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley, Gloucestershire GL11 6BD, (GB)  
 Robbins, William Philip, 19 Springhill, Cam, Gloucestershire GL11 5PE, (GB)  
 Finch, Helen Rosemary, Tyley, Coombe, Wotton-Under-Edge, Gloucester. GL12 7ND, (GB)  
 Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)  
 LEGAL REPRESENTATIVE:  
 Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20, rue Louis Chirpaz, 69131 Ecully Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 674443 A2 950927 (Basic)  
EP 674443 A3 951213  
EP 674443 A3 981223  
EP 674443 B1 010509

APPLICATION (CC, No, Date): EP 95301301 950228;

PRIORITY (CC, No, Date): GB 9405914 940324

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 891089 (EP 98202149)

(EP 98202154)

EP 884910 (EP 98202132)

EP 891088 (EP 98202133)

EP 897244 (EP 98202134)

EP 901286 (EP 98202135)

EP 901287 (EP 98202166)

EP 896473 (EP 98202170)

EP 896474 (EP 98202171)

EP 896476 (EP 98202174)

EP 896475 (EP 98202172)

INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38

ABSTRACT WORD COUNT: 102

NOTE:

Figure number on first page: 61

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	2897
CLAIMS B	(English)	200119	647
CLAIMS B	(German)	200119	609
CLAIMS B	(French)	200119	752
SPEC A	(English)	EPAB95	128616
SPEC B	(English)	200119	122384
Total word count - document A			131543
Total word count - document B			124392
Total word count - documents A + B			255935

...SPECIFICATION stages in the pipeline are afforded enhanced flexibility in configuration and processing.

Each of the processing stages in the pipeline may include both primary and **secondary storage**, and the stages in the pipeline are reconfigurable in response to recognition of selected tokens. The tokens in the pipeline are dynamically adaptive and may...the maximum permitted by JPEG). However, additional user intervention is required if more than 4 color component are to be decoded. JPEG only allows a **maximum** of 4 components in any scan.

#### A.14.4.8 Non-standard variants

As stated above, the Spatial Decoder supports some picture formats beyond those...quantization tables are loaded. This should be done while iq(underscore)access is set to 1. The values in Table A.15.2 should be **written** into locations 0x00 to 0x3F of the inverse quantizer's extended address space (accessible through the keyhole registers iq(underscore)keyhole(underscore)address and iq...

10/3,K/5 (Item 5 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00711605

**Reconfigurable data processing stage**

**Rekonfigurierbare Datenverarbeitungsstufe**

**Etage d'operation de donnees reconfigurable**

PATENT ASSIGNEE:

DISCOVISION ASSOCIATES, (260273), 2355 Main Street Suite 200, Irvine, CA 92714, (US), (Proprietor designated states: all)

INVENTOR:

Wise, Adrian Philip, 1 Westbourne Cottages, Frenchay, Bristol, BS16 1NA,  
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Sotheran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley,  
Gloucestershire, GL11 6BD, (GB)

Robbins, William Philip, 19 Springhill, Cam, Gloucestershire, GL11 5PE,  
(GB)

LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 674446 A2 950927 (Basic)

EP 674446 A3 960814

EP 674446 B1 010801

APPLICATION (CC, No, Date): EP 95301300 950228;

PRIORITY (CC, No, Date): GB 9405914 940324

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL

INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38

ABSTRACT WORD COUNT: 144

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Figure number on first page: 10

LANGUAGE (Publication,Procedural,Application): English; English; English

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CLAIMS A	(English)	EPAB95	2475
CLAIMS B	(English)	200131	1079
CLAIMS B	(German)	200131	1072
CLAIMS B	(French)	200131	1186
SPEC A	(English)	EPAB95	125236
SPEC B	(English)	200131	121335
Total word count - document A			127738
Total word count - document B			124672
Total word count - documents A + B			252410

...SPECIFICATION stages in the pipeline are afforded enhanced flexibility in configuration and processing.

Each of the processing stages in the pipeline may include both primary and **secondary storage**, and the stages in the pipeline are reconfigurable in response to recognition of selected tokens. The tokens in the pipeline are dynamically adaptive and may...valid DATA Token, however, the signal QI2 will be a "0", and the signal S3 and the output QO3, will be forced HIGH until the **DATE** ...DATA is loaded into LDOUT, OUTEXTN will be "1", and during the second **time**, OUTEXTN will be "0", indicating the true end of the token.

The output signal QVIN from the validation latch LVIN is combined with the signal...able to perform the necessary operations for each of the standards, and the control, as to which operations are to be performed at a given **time**, come as tokens. There is one processing element that differs between the different stages to provide this capability. In the state machine ROM of the...Again, a swing buffer which is partially full of data will not empty until it is totally filled and/or it knows that it is **time** to empty. The PICTURE...access **register**. **Writing** 1 to this register allows the interface timing registers (in Table A.5.2) to be modified. While interface...

...SPECIFICATION likely as levels of integration progress so that the number of chips in a system drops) there will still be the considerable advantage of better **time-to-market** than can be achieved, since the same design can be reused.

In particular, note the situation that occurs when it becomes necessary to extend the...valid DATA Token, however, the signal QI2 will be a "C", and the signal S3 and the output QO3, will be forced HIGH until the **DATE** (underscore)TOKEN signal once again goes to a "1".

The output QO3 (the NOT(underscore)DUPLICATE signal) is also fed back and is combined with...of multi-standard adaptability, there are a number of different tables and the circuitry selects the appropriate table for the appropriate standard at the appropriate **time**. Each standard has multiple tables; the circuitry selects from the set at any given time. Within any one standard, the circuitry selects one table at...under the

control of the write address 313 and control 314. From RAM1 311 and RAM2 312, the data is written into DRAM 515. When **writing** data into DRAM 315, the DRAM row address is provided by the address generator, and the column address is provided by the write address and...interval should be configured only once after each reset.

While reset is asserted, the DRAM interface is unable to refresh the DRAM. However, the reset **time** required by the decoder chips is sufficiently short, so that it should be possible to reset them and then to re-configure the DRAM interface...and then 0x04 into coded(underscore)data (7:0). The start of this new DATA Token then passes into the Spatial Decoder for processing.

Each **time** a new 8 bit value is written to coded(underscore)data (7:0), the current Token is extended. Coded(underscore)extn need only be accessed...

...is indicated by writing 0 to coded(underscore)extn followed by writing the last word of the current Token into coded data (7:0).

Each **time** before **writing** to coded(underscore)data(7:0), coded(underscore)busy should be inspected to see if the interface is ready to accept more data.

A.10...first stage in parsing the coded data. The Start Code Detector is the first block on the Spatial Decoder following the input circuit.

The start/**marker** code patterns are designed so that they can be identified without decoding the entire bitstream. Thus, they can be used in accordance with the present...16.1 Structure of JPEG pictures

This section provides an overview of some features of the JPEG syntax. Please refer to the coding standard for **full** details.

JPEG provides a variety of mechanisms for encoding individual pictures. JPEG makes no attempt to describe how a collection of pictures could be encoded...

10/3,K/6 (Item 6 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00466920

**Improvements in or relating to integrated circuits.**  
**Verbesserungen in oder in Beziehung zu integrierten Schaltungen.**  
**Améliorations dans ou relatif a des circuits integres.**

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PATENT (CC, No, Kind, Date): EP 476282 A2 920325 (Basic)  
EP 476282 A3 920624

APPLICATION (CC, No, Date): EP 91112866 910731;

PRIORITY (CC, No, Date): US 560961 900731

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G11C-005/14;

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FULLTEXT AVAILABILITY:

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CLAIMS A	(English)	EPABF1	471
SPEC A	(English)	EPABF1	97767
Total word count - document A			98238
Total word count - document B			0
Total word count - documents A + B			98238

...SPECIFICATION CODE2. Schematic 14.0, the Row **Redundancy** Address circuit, is used 120 times in the chip. Tables RRA ...of P-channel

transistor 52:MP7.

Appendix 19 contains the code for Global Amplifier Selected Circuit, GASEL Shown on FIG. 52.

FIG. 53 illustrates the **Date Write Enable Bar Circuit**, DWE...

...N. The code for the **Date Write Enable Bar Circuit** of FIG. 53 is contained in Appendix 21.

FIG. 54 illustrates Input-Output Clamp Circuit IOCLMP. Input terminal ATD0Q is connected to...

10/3,K/7 (Item 7 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00341188

**Storage subsystem including an error correcting cache.**

**Speichersubsystem mit Fehlerkorrekturcache-Speicher.**

**Sous-systeme de memoire a antememoire de correction d'erreur.**

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 348616 A2 900103 (Basic)

EP 348616 A3 910313

EP 348616 B1 951011

APPLICATION (CC, No, Date): EP 89106935 890418;

PRIORITY (CC, No, Date): US 212432 880628

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-012/08; G06F-011/10;

ABSTRACT WORD COUNT: 108

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

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CLAIMS A	(English)	EPABF1	638
CLAIMS B	(English)	EPAB95	558
CLAIMS B	(German)	EPAB95	516
CLAIMS B	(French)	EPAB95	654
SPEC A	(English)	EPABF1	77953
SPEC B	(English)	EPAB95	77946
Total word count - document A			78600
Total word count - document B			79674
Total word count - documents A + B			158274

...SPECIFICATION 20-1 comprises a high speed fixed control store 20-1a of 84k bytes, a pagable area (8k byte, 2k word, 4-way associative pagable area ) 20-1b, a directory 20-1c for the pagable control store 20-1b, a control store address register (CSAR) 20-1d, and an 8-element...location in storage, the store must complete before the fetch is allowed. This is part of the single-image storage requirement discussed below. At the time of processor serialization, all stores pending for the processor must also be completed to storage.

#### 1.1.2 Single-image Storage

The storage subsystem 10...or inpage freeze with storage uncorrectable error indication. Failure to do so may result in a lock-out condition as the write memory check-bit, **redundant** -bit, and special function registers **storage** command cannot complete when a quiescent processor possesses a lock, line-hold, or inpage freeze with storage uncorrectable error indication on the requested L2 cache...line-holds, or inpage freeze with storage uncorrectable error indication. Failure to do so may result

in a lock-out condition as the write memory **redundant** -bit address registers **storage** command cannot complete when a quiescent processor possesses a lock, line-hold, or inpage freeze with storage uncorrectable error indication on the requested L2 cache...

...port. All four control chips within the memory cards of the selected memory port participate in the write operation, accepting a unique value for their **redundant** -bit address registers from the **storage** data buss in preset positions. Each chip contains two four-byte error checking and correction networks, each of which maintains two six-bit redundant-bit...

10/3,K/8 (Item 8 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00306062

Digital data processing system.

Digitales Datenverarbeitungssystem.

Systeme du traitement de donnees numeriques.

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 300516 A2 890125 (Basic)

EP 300516 A3 890426

EP 300516 B1 931124

APPLICATION (CC, No, Date): EP 88200921 820521;

PRIORITY (CC, No, Date): US 266413 810522; US 266539 810522; US 266521

810522; US 266415 810522; US 266409 810522; US 266424 810522; US 266421

810522; US 266404 810522; US 266414 810522; US 266532 810522; US 266403

810522; US 266408 810522; US 266401 810522; US 266524 810522

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

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INTERNATIONAL PATENT CLASS: G06F-009/46; G06F-012/14;

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CLAIMS B	(English)	EPBBF1	1018
CLAIMS B	(German)	EPBBF1	868
CLAIMS B	(French)	EPBBF1	1115
SPEC B	(English)	EPBBF1	154256
Total word count - document A			0
Total word count - document B			157257
Total word count - documents A + B			157257

...SPECIFICATION 10716.

Referring now to WSM 10720 and VMMRQ 10722, as previously stated these mechanisms are concerned with the management of MEM 10112's available

address **space** . For example, if MHT 10716 and MFT 10718 not contain an entry for a page referenced by the current procedure, an MHT/MFT fault ...JO Ports, described above, to JP 10114. These three ports share the entire address base of MEM 10112, but IOS 10116, for example, may be **limited** from making full use of MEM 10112's address space. Each port has a different set of allowed operations. For example, JO Port can use... cycle later than that physical descriptors 0 and Length fields, as has been previously discussed.

Referring to Fig. 202, physical descriptor FN fields to be **written** into ATU 10228 are, in general, generated by DESP 20210. FN fields to be written into ATU 10228 are provided to ATU 10228 Data Input...

...to describe differences between the generalized cache and NC 10226. ATU 10228 and PC 10234 will then be described by description of differences between ATU **10228** and PC 10234 and the generalized cache.

Referring to Fig. 240, a partial block diagram of a generalized four-way, set associative cache is shown...

**10/3,K/9 (Item 9 from file: 348)**

DIALOG(R)File 348:EUROPEAN PATENTS

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00306058

**Digital data processing system.**

**Digitales Datenverarbeitungssystem.**

**Systeme de traitement de donnees numeriques.**

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 290111 A2 881109 (Basic)  
EP 290111 A3 890503  
EP 290111 B1 931222

APPLICATION (CC, No, Date): EP 88200917 820521;

PRIORITY (CC, No, Date): US 266404 810522

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

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LANGUAGE (Publication,Procedural,Application): English; English; English  
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CLAIMS B	(German)	EPBBF1	890
CLAIMS B	(French)	EPBBF1	1185
SPEC B	(English)	EPBBF1	154314
Total word count - document A			0
Total word count - document B			157433
Total word count - documents A + B			157433

...SPECIFICATION as the final transfer described above. That is, a single 32 bit word will be transferred wherein non-data bits are fill bits.

Bulk data **storage** in MEM 112 is provided in MSB 1810, which is comprised of one or more Memory Array cards (MAs) 1812. The data path into and...and generation and manipulation of logical descriptors. As previously described, with reference to CS 10110 addressing structure, logical descriptors are logical addresses, or pointers, to **data** stored in MEM 10112. Logical descriptors are used, for example, as architectural base pointers or microcontrol pointers in ABRs 10364 and mCRs 10366 as shown...field entry in LENGRF 20236 will contain, using the same example as previously described, a value of 70. That data item's initial bias entry **written** into a corresponding address **space** of BIASM 23910 will contain a bias value of 32. That initial bias value of 32 indicates that at least the first read operation required...resolution of Names to logical descriptors, by NC 10226; (2) translation of logical descriptors to physical descriptors, by ATU 10228; and (3) confirmation of access **writes** to objects, by PC 10234.

As shown in Fig. 202, NC 10226 address input (ADR) is connected from NAME Bus 20224. NC 10226 Write Length...cycle later than that physical descriptors 0 and Length fields, as has been previously discussed.

Referring to Fig. 202, physical descriptor FN fields to be **written** into ATU 10228 are, in general, generated by DESP 20210. FN fields to be written into ATU 10228 are provided to ATU 10228 Data Input...

...associative cache.

As such, the structure and operation of NC 10226, ATU 10228, and PC 10234 will be described by reference to and description of a generalized cache similar but not necessarily identical to each of NC 10226, ATU 10228, and PC 10234. Reference will be made to NC 10226 in...

10/3,K/10 (Item 1 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00814145

**A METHOD FOR EXECUTING A NETWORK-BASED CREDIT APPLICATION PROCESS**

**PROCEDE DE MISE EN OEUVRE D'UN PROCESSUS DE DEMANDE DE CREDIT EN RESEAU**

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Patent and Priority Information (Country, Number, Date):

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Application: WO 2000US35216 20001222 (PCT/WO US0035216)

Priority Application: US 99470805 19991222; US 99469525 19991222; US  
99470039 19991222

Designated States: AL AM AU AZ BA BB BG BR BY CA CH CN CZ DE DK DM DZ  
EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG UZ VN YU ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 98671

Fulltext Availability:

Detailed Description

Detailed Description

... buyer's credit line is also earmarked in operation 1606 to indicate the amount of the purchase order to prevent the buyer from exceeding the **maximum** amount of credit. In operation 1608, the seller is alerted to start negotiating on the invoice. The initiation of negotiation is confirmed in operation 1610...and should be able to enter a free format description as well as the key data items specified in the data requirements section. Data and **time stamps** should be automatically registered and Incident and Request management staff should have access to display all open incidents and requests as well as the incident...

...given to provide a free format update of actions and investigations, to assign the incident / request to a support group, or to escalate the incident. **Date** and **time stamps** should be attached to each action and the full incident/request history should be available to the person performing the update.

Re-assign Incidents lRequests...

...and requests to be assigned to different support groups, if further investigation is required.

Close Incidents lRequests

Incidents and requests should be closed with a **date** and **time stamp** to help trend analysis and service level reporting.

Log Problems

Problems can be logged both as a result of one or more incidents, or through...

10/3,K/11 (Item 2 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00806384

**NETWORK AND LIFE CYCLE ASSET MANAGEMENT IN AN E-COMMERCE ENVIRONMENT AND METHOD THEREOF**

**GESTION D'ACTIFS DURANT LE CYCLE DE VIE ET EN RESEAU DANS UN ENVIRONNEMENT DE COMMERCE ELECTRONIQUE ET PROCEDE ASSOCIE**

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200139030 A2 20010531 (WO 0139030)

Application: WO 2000US32324 20001122 (PCT/WO US0032324)

Priority Application: US 99444775 19991122; US 99447621 19991122

Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CU CZ DE DK

DZ EE ES FI GB GE GH GM HU ID IL IS JP KE KG KP KR KZ LK LR LS LT  
 LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SL TJ TM TR  
 TT UA UG UZ VN YU ZW  
 (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
 (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
 (EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 171499

Fulltext Availability:

Detailed Description

Detailed Description

... The benefit areas include a revenue enhancement benefit area 402, a cost reduction benefit area 404, and a capital reduction benefit area 406.

Each benefit **area** includes a number of associated benefits. Illustrative benefits associated with revenue enhancement 402 include: (a) faster time to site integration; (b) better on-line network...the available supply of manufacturer offerings. The supply and demand for manufacturer offerings are compared to one another in operation 806 and this comparison is **used** in operation 808 to plan future supply and demand for the manufacturer offerings.

So In an embodiment of the present invention, collaborative forecasting may also...count if the time exceeds the limits.

The switch clock reflects local switch time and is used for all times except billing. Billing information is **recorded** in epoch **time**, which in this embodiment is UTC. The Time offset is a number reflecting the switch time relative to the UTC, that is, the offset due...

...to epoch time and back.

i) Epoch Time + (Sign Bit \* Time Offset) = Local Switch Time  
 5 ii) Local Switch Time - (Sign Bit \* Time Offset) = Epoch **Time**  
 The switch **records** the **Time** Offset in the SER using a value where one (1) equals one (1) minute, and computes the Time Offset in seconds and adds this value...

...recorded. For example, Central Standard Time is six (6) hours before UTC. In this case, the Sign Bit indicates " I for negative offset and the **Time** Offset value **recorded** in the SER would be 360 (6 hours 60 minutes/hour = 360 minutes). See Figure 35 for more details on the SER record format. When...field of the 32-word call record. The 32-word call record also includes an NCBD Location (NCIDLOC) field to identify when the NCID is **recorded** in the AuthCode field of the call **record**. If the NCID Location field contains a 'I,' then the AuthCode field contains the NCID. If the NCID Location field contains a '0,' then the...parameter is shown below in Table 44A  
 Generic Digits Parameter.

Code: 11000001

Type: 0

Byte #, Bit Description

byte 1, bits 0-4 Type of Digits : **Indicates** the contents of the parameter.

This field has a binary value of '1 101 Vto indicate that the parameter contains the NCID.

byte 1, bits...

00806383

**COLLABORATIVE CAPACITY PLANNING AND REVERSE INVENTORY MANAGEMENT DURING  
DEMAND AND SUPPLY PLANNING IN A NETWORK-BASED SUPPLY CHAIN ENVIRONMENT  
AND METHOD THEREOF**

**PLANIFICATION EN COLLABORATION DES CAPACITES ET GESTION ANTICIPEE DES  
STOCKS LORS DE LA PLANIFICATION DE L'OFFRE ET DE LA DEMANDE DANS UN  
ENVIRONNEMENT DE CHAINE D'APPROVISIONNEMENT FONDEE SUR LE RESEAU ET  
PROCEDE ASSOCIE**

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200139029 A2 20010531 (WO 0139029)

Application: WO 2000US32309 20001122 (PCT/WO US0032309)

Priority Application: US 99444655 19991122; US 99444886 19991122

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DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL  
TJ TM TR TT TZ UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Word Count: 157840

Fulltext Availability:

Detailed Description

Detailed Description

... disk drive, etc. The removable storage drive 2810 reads from and/or  
writes to a removable storage unit 2812 in a well known manner.

Removable **storage** unit 2812, also called a program **storage** device or  
a computer program product, represents a floppy disk, magnetic tape,  
compact disk, etc. The removable storage unit 2812 includes a computer  
usable storage...ITU H.322 Visual Telephone Terminals over Guaranteed  
Quality of Service LANs ITU H.323 ITU Recommendation for Visual Telephone  
Systems and Equipment for Local **Area** Networks which provide a  
non-guaranteed quality of service.

ITU H.324 Recommendation for Terminals and Systems for low bitrate(28.8  
Kbps) multimedia communication...Oracle as customized by the user.

Oracle 4640 - Oracle is a relational database management system.

Generate Time Key ScD t 4642 - Script which generates New **Time** **Records**  
from alerts in the

@p

Netcool Object Server.

New Time Records 4644 -Time records corresponding to new alerts in  
Netcool Object Server which need to...

10/3,K/13 (Item 4 from file: 349)

00806382

METHOD FOR AFFORDING A MARKET SPACE INTERFACE BETWEEN A PLURALITY OF  
MANUFACTURERS AND SERVICE PROVIDERS AND INSTALLATION MANAGEMENT VIA A  
MARKET SPACE INTERFACE

PROCEDE DE MISE A DISPOSITION D'UNE INTERFACE D'ESPACE DE MARCHE ENTRE UNE  
PLURALITE DE FABRICANTS ET DES FOURNISSEURS DE SERVICES ET GESTION  
D'UNE INSTALLATION VIA UNE INTERFACE D'ESPACE DE MARCHE

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200139028 A2 20010531 (WO 0139028)

Application: WO 2000US32308 20001122 (PCT/WO US0032308)

Priority Application: US 99444773 19991122; US 99444798 19991122

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DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT TZ UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Availability:

Detailed Description

Detailed Description

... Supply Planning

uti

component in this illustrative embodiment of the present invention may  
include the following.

duplication reduction, distribution facility rationalization, reduced  
inventories, and manufacturing **capacity** utilization.

With regards to the Order Management component for this illustrative  
embodiment, benefits for the service provider may include the following  
(as illustrated in Figure 4): **duplication** reduction, and procurement  
rationalization. Benefits for the manufacturer under the Order Management  
component in this illustrative embodiment of the present invention may  
include: faster order...fixed call record formats cannot handle expanded  
data fields as the telecommunications network becomes more complex with  
new features and telephone numbers.

Contemporary fixed length **record** forinats include **time** point fields  
**recording** local **time** in three (3) second increments where local switch  
time represents the time of day at a switch. The I d other network  
subsystems.

t mepoint...

...32-word call record format for the typical telephone call, which

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comprises the majority of all telephone calls, and uses a 64-word call  
**record** format when additional information is needed regarding the call.  
This implementation provides the flexibility needed to efficiently manage  
varying data requirements of a given call into the variable call record  
format of the present invention.

This embodiment also records timepoints in the epoch time format. The  
embodiment **records** the origination **time** of a call in epoch **time**

format, and the remaining timepoints are offsets, or the number of seconds, from that origination time. This embodiment solves the problems associated with converting to...two (2) records are identical except for some fieldspecific information described below.

A SER is reserved for special events such as the passage of each **hour mark** , **time** changes, system recoveries, and at the end of a billing block. The SER record format is also described in more detail below.

Figures 36 and...contains a N, the valid field values are the digits 2

Each call record, except SER, contains call specific timepoint fields. The timepoint fields are **recorded** in epoch **time** format. Epoch time is the number of one second increments from a particular date/time in history. The embodiment of the present invention uses a...

...is not a limitation. It would be readily apparent to one skilled in the relevant art to implement an epoch time based on another date/**time** . In the **records** , Timepoint I represents the epoch time that is the origination time of the call 3602. The other timepoint stored in the records are the number...

...count if the time exceeds the limits.

The switch clock reflects local switch time and is used for all times except billing. Billing information is **recorded** in epoch **time** , which in this embodiment is UTC. The Time offset is a number reflecting the switch time relative to the UTC, that is, the offset due...

...time to epoch time and back.

i) Epoch Time + (Sign Bit \* Time Offset) = Local Switch Time  
ii) Local Switch Time - (Sign Bit \* Time Offset) = Epoch **Time**  
The switch **records** the **Time** Offset in the SER using a value where one (1) equals one (1) minute, and computes the Time Offset in seconds and adds this value...

...recorded. For example, Central Standard Time is six (6) hours before UTC. In this case, the Sign Bit indicates " 1 for negative offset and the **Time** Offset value **recorded** in the SER would be 360 (6 ...equation (11) from above, if the local switch time were midnight, the corresponding epoch time might be, for example, 1,200,000,000. Subtracting the **Time** Offset of -21,600 results in a corrected epoch time of 1,200,021,600 seconds, which is the epoch time for 6 hours after ...

10/3,K/14 (Item 5 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00784139

**A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A SELF-DESCRIBING STREAM IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT**  
**SYSTEME, PROCEDE ET ARTICLE DE FABRICATION DESTINES A UN FLUX D'AUTODESCRIPTEURS DANS UN ENVIRONNEMENT DE MODELES DE SERVICES DE COMMUNICATION**

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

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Priority Application: 99387070 19990831

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DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Availability:

Detailed Description

Detailed Description

... or several designs showing the layout of the structure, how different spaces fit together, how everything looks from different views, what materials are to be **used** , and so forth.

Step 3: Model & Test 206. Not every architectural project has this step, but in many cases, the architect will create a scale...is important to evaluate whether the application can benefit from a Netcentric style implementation immediately or in the future.

50

Even if a traditional client/**server** approach (e.g. using Visual Basic or PowerBuilder) is decided upon, the use of Netcentric concepts to produce significant reductions in software packaging and distribution... administrative personnel will face a steep learning curve: they will need to learn UNIX, DCE, and Encina (the layers on which CICS/6000 is built). (NOTE : VIS/TP and UniKix are also implementations of CICS in the UNIX environment, but they are not included in this evaluation.)

Possible Product Options

Tuxedo...

10/3,K/15 (Item 6 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00784131

**A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A MULTI-OBJECT FETCH COMPONENT IN AN INFORMATION SERVICES PATTERNS ENVIRONMENT**  
**SYSTEME, PROCEDE ET ARTICLE MANUFACTURE POUR COMPOSANT DE RECUPERATION MULTI-OBJET DANS UN ENVIRONNEMENT CARACTERISE PAR DES SERVICES D'INFORMATIONS**

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200116723 A2 20010308 (WO 0116723)

Application: WO 2000US24083 20000831 (PCT/WO US0024083)

Priority Application: US 99386238 19990831

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EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
TZ UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD TJ TM  
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Fulltext Availability:  
Detailed Description

#### Detailed Description

... favor keeping most business logic at the server side. Also Netcentric architectures tend to be more loosely coupled than (the still dominant two-tier) client/**server** systems.

49

The following sections identify the main characteristics associated with a Netcentric, Client Server or Host based technology generation. This list should in no...from the Netscape browser. Now, other browsers such as Microsoft's Internet Explorer are beginning to support Plug-in technology as well. Also, Plug-ins **written** for one browser will generally need to be modified to work with other browsers. Plug-ins are also operating system dependent.

Therefore, separate versions of...particular business concept, and as a whole, the Business Component Model is a depiction or portrait of the entire business. It's also important to **note** that although this begins the process of defining the application architecture for a set of desired business capabilities, the applicability of the Business Component Model ...

10/3,K/16 (Item 7 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00784126

**SYSTEM, METHOD, AND ARTICLE OF MANUFACTURE FOR AN EXCEPTION RESPONSE TABLE  
IN ENVIRONMENT SERVICES PATTERNS**  
**SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION DESTINES A UNE TABLE DE REPONSE  
D'EXCEPTION DANS DES CONFIGURATIONS DE SERVICES D'ENVIRONNEMENT**

Patent Applicant/Assignee:

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Inventor(s):

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Application: WO 2000US24086 20000831 (PCT/WO US0024086)

Priority Application: US 99387873 19990831

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DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR  
TT UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Detailed Description

Detailed Description



... complex system, the class hierarchies for related classes can become extremely confusing, with many dozens or even hundreds of classes.

Flow of control. A program written with the aid of class libraries is still responsible for the flow of control (i.e., it must control the interactions among all the objects...100 companies. The group's building blocks are called ActiveX Controls, small, fast components that enable developers to embed parts of software in hypertext markup language (HTML) pages. ActiveX Controls work with a variety of programming languages including Microsoft Visual C++,

29

Borland Delphi, Microsoft Visual Basic programming system and...user base.

How do the vendors compare against one another?

Issues to consider are type, quality and responsiveness of support, alliances/partnerships with other companies, market presence (install base, customer list, number of production copies, etc.).

vendor industry, alignment of mission and vision with that of potential customer/evaluator, product philosophy...is granted to resources through the directory.

Authentication for accessing resources across an Internet or intranet is not as simple and is a rapidly evolving area. When building e-commerce Web sites there may be a need to restrict access to areas of information and functionality to known customers or trading...and deadlines such as those associated with government regulations, contractual obligations, accounting periods, customer service, and sales lead follow-up. Typical workflow goals are shorter time to market and quicker response times. Are multiple people involved in the business process? Is there a need for work scheduling? task.

Do integration issues exist?  
It...

10/3,K/17 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00784125

SYSTEM, METHOD, AND ARTICLE OF MANUFACTURE FOR PIECEMEAL RETRIEVAL IN AN INFORMATION SERVICES PATTERNS ENVIRONMENT

SYSTEME, PROCEDE ET ARTICLE DE FABRICATION DESTINES A LA RECHERCHE FRAGMENTAIRE DANS UN ENVIRONNEMENT DE MODELES DE SERVICES D'INFORMATIONS

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Priority Application: US 99386433 19990831

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FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ  
VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM  
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Fulltext Availability:  
Detailed Description

#### Detailed Description

... pieces of code, each programmer puts those pieces together in a different way.

Two different programmers can use the same set of class libraries to **write** two programs that do exactly the same thing but whose internal structure (i.e., design) may be quite different, depending on hundreds of small decisions...be achieved in various ways as listed below.  
Specialized QoS Communications Protocols - provide guaranteed QoS.

Asynchronous Transfer Mode (ATM) - ATM is a connection-oriented wide **area** and local area networking protocol that delivers QoS on a per-connection basis. QoS is negotiated as part of the initial connection set up and...

10/3,K/18 (Item 9 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00777021

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR AN E-COMMERCE BASED USER FRAMEWORK DESIGN FOR MAINTAINING USER PREFERENCES, ROLES AND DETAILS  
SYSTEME, PROCEDE ET ARTICLE MANUFACTURE UTILISES EN COMMERCE ELECTRONIQUE POUR LA CONCEPTION DE STRUCTURES D'UTILISATEURS DESTINEES A PRESERVER LES PREFERENCES, ROLES ET DETAILS DES UTILISATEURS

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Patent Applicant/Inventor:

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Legal Representative:

HICKMAN Paul L, Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA, US

Patent and Priority Information (Country, Number, Date):

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Application: WO 2000US20549 20000728 (PCT/WO US0020549)

Priority Application: US 99364091 19990730

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(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Availability:  
Detailed Description

#### Detailed Description

... Until recently, HTML has been the dominant technology used in development of Web-based solutions. However, HTML has proven to be inadequate in the following **areas**.

Poor performance;  
Restricted user interface capabilities;  
Can only produce static Web pages;  
Lack of interoperability with existing applications and data; and  
29

Sun Microsystem's...SAP connector component

9 Call corresponding SAP method passing in selectionCriteria.SAP may  
return an ADO Recordset with the business data and a second ADO  
**Recordset** with the Result codes.

\* Call an error utility function that maps the error return codes onto  
the applications error handling system.

Map the return recordset...and then are freed.

Package Threading

Every time a package receives a method call, MTS creates a new thread to  
service the request.

At the **time** of **writing** this portion of the present description, MTS  
packages have a maximum limit of 100 threads per package. If the number  
of the incoming concurrent...

10/3,K/19 (Item 10 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00777020

**A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR RESOURCE ADMINISTRATION IN  
AN E-COMMERCE TECHNICAL ARCHITECTURE**

**SYSTEME, PROCEDE ET ARTICLE MANUFACTURE POUR L'ADMINISTRATION DE RESSOURCES  
DANS UNE ARCHITECTURE TECHNIQUE DE COMMERCE ELECTRONIQUE**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200109791 A2-A3 20010208 (WO 0109791)

Application: WO 2000US20547 20000728 (PCT/WO US0020547)

Priority Application: US 99364161 19990730

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DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Availability:

Detailed Description

Detailed Description

... media content that requires storage. The environment may support a  
high volume of media files, which must be considered in the  
backup/restore plans. Storage **capacity** planning should allow for the  
typically increased size of these file types.

As the amount of storage may grow significantly over time on a large...

strength of the solution and integration into your environment. There are several examples of technologies which can meet your requirements, including the use of one-time passwords, time based passwords, or challenge response schemes. Once chosen and implemented, a secure authentication mechanism can be incorporated with both your operating system and your application...

10/3,K/20 (Item 11 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00777017

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A HOST FRAMEWORK DESIGN IN AN E-COMMERCE ARCHITECTURE

SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION DESTINES A LA CONCEPTION D'UNE STRUCTURE D'ORDINATEUR CENTRAL DANS UNE ARCHITECTURE DE COMMERCE ELECTRONIQUE

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

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Application: WO 2000US20560 20000728 (PCT/WO US0020560)

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FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US

UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Availability:

Detailed Description

Detailed Description

... abstract class contains methods called by the application developer objects to manage attribute values common to all persistable business objects (user id and last update **timestamp**). In addition, the AFPLPersistableObj class represents the superclass of a persisted object. In order to persist a business class; the application developer extends AFPLPersistableObj and...

...AFPLPersistableObj abstract methods.

The AFPLPersistableObj defines the following methods.

96

Return the column names common to all persistable business objects (user id and last update **timestamp**). The application developer invokes this method from the constructor method of a business object,  
Return attributes common to all persistable business objects (user id and last update **timestamp**). The application developer invokes this method from the getPersistedAttributes method of a business

object.

Abstract method that all Business Objects must implement. If the passed in attribute. is one of the attributes common to all persistable business objects (user id and last update **timestamp** ), compare the passed in value to the currently held attribute value. The application developer should also invoke the superclass **isEqual**.  
Abstract method that all...

...implement. Set the value of the attribute passed as parameter  
Set the user id value  
97  
Return the user id value  
Set the last update **timestamp** value  
Return the last update **timestamp** value.

lei Adds the last update **timestamp** value and user id to the passed in persistable business object.

The application developer invokes this method from the **setUserIdTimestampToObj** method of a business object...

...names.

Return all the attributes to persist. The application developer invokes the **addPersistedAttribute** method of the super class to add user id and last update **timestamp** attributes.

Return the primary key field name.@@--Return all the primary key values.

Return vector of all key attributes.

Return the array of all key...action during the session, activity components accessed during the session, and business components accessed during the session. During the session, the current page, previous page **record** , and information I 0 are provided to at least one activity component in operation 1810. Also in operation 1810, the activity component generates output based...

...activity

Activit

,y. Component -context

Business Component context - shared among activities,

Register listener

Broadcast Message to registered listeners

Encode Database User Name and Password

**Note** : Encoding implemented only once (as part of system ...Sets the HTML caption value of the object. The, text may be displayed next to the checkbox object.

Sets the HTML name of the checkbox

**Mark** as checked the checkbox when generating it

Mark as not checked the checkbox when generating it.

Sets the HTML value of the checkbox

Add an...database connection from application

Database mapping

Map an object to a database table

Object query

Trigger queries on objects

Easily iterate through the results

Record locking  
Optimistic locking  
Pessimistic locking  
199  
Event Register event  
Handler Create event  
Maintain event reference  
Process event  
Information  
Warning  
Logical Unit of Work  
Fatal

Display...these functions need to understand how their support roles may change, and what new demands the technology infrastructure may place upon them. Ensuring that these **areas** are comfortable supporting the new infrastructure, and that they are able to troubleshoot problems is critical to the overall support and success of the business...Ex. "C:

Oracle  
ReTA"

At this point a full operating system backup should be made, and the backup set stored. In future, if the database **server** goes down, this **backup** may be used to quickly restore the server to a point where the Oracle Recovery Manager can take over and complete the backup.

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Add...pre-installation suggestions and the installation steps required for setup and configuring Site Server 3.0 Commerce Edition.

Pre-histallation Suggestions

Do not install Site **Server** on a **Backup** Domain Controller.

Do not install Exchange Server on a Site Server. Both products are resource intensive.

Do not install Proxy Server on a Site Server...

10/3,K/21 (Item 12 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00777011 \*\*Image available\*\*

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A CODES TABLE FRAMEWORK DESIGN IN AN E-COMMERCE ARCHITECTURE  
SYSTEME, PROCEDE ET ARTICLE FABRIQUE POUR LA CONCEPTION D'UNE STRUCTURE DE TABLES DE CODES DANS UNE ARCHITECTURE DE COMMERCE ELECTRONIQUE

Patent Applicant/Assignee:

AC PROPERTIES BV, Parkstraat 83, NL-2514 JG 'S Gravenhage, The Hague, NL,  
NL (Residence), NL (Nationality), (For all designated states except:  
US)

Patent Applicant/Inventor:

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(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037,  
Palo Alto, CA 94303, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200109716 A2-A3 20010208 (WO 0109716)

Application: WO 2000US20705 20000728 (PCT/WO US0020705)

Priority Application: US 99364491 19990730

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US  
UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English  
Filing Language: English  
Fulltext Word Count: 136146

Fulltext Availability:  
Detailed Description

#### Detailed Description

... strength of the solution, and integration into your environment. There are several examples of technologies which can meet your requirements, including the use of one-time passwords, time based passwords, or challenge response schemes. Once chosen and implemented, a secure authentication mechanism can be incorporated with both your operating system and your application...its ability to integrate with the execution and development environments.

#### Supporting Infrastructure

The supporting infrastructure is the subset of operating systems, utilities, languages, and protocols used to support the management of the system. The supporting infrastructure is most often determined by the execution and development environments and the business applications on

...

10/3,K/22 (Item 13 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00739517 \*\*Image available\*\*

#### A HIGH PERFORMANCE NETWORK INTERFACE INTERFACE RESEAU HAUTE PERFORMANCE

Patent Applicant/Assignee:

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(Residence), US (Nationality)

Inventor(s):

MULLER Shimon, Apartment D, 983 La Mesa Terrace, Sunnyvale, CA 94086, US  
GENTRY Denton, 34892 Sea Cliff Terrace, Fremont, CA 94555, US  
WATKINS John, 1469 Yukon Drive, Sunnyvale, CA 94087, US  
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Legal Representative:

VAUGHAN Daniel E, Park & Vaughan LLP, Suite 5, 399 Sherman Avenue, Palo Alto, CA 94306, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052904 A1 20000908 (WO 0052904)

Application: WO 2000US5349 20000229 (PCT/WO US0005349)

Priority Application: US 99259765 19990301

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 78802

Fulltext Availability:  
Claims

#### Claim

... datagram may then be provided to the destination entity in a highly efficient manner. For example, rather than providing data from one packet at a time (and one byte at a time) in separate "copy" operations, a "page-flip" operation may be performed. In a page-flip, an entire memory page...a cache line of storage (e.g., sixty-four bytes for a SolariSTMworkstation) is skipped in the buffer before storing each packet. The extra padding area may be used by software that processes

the packets and/or their completion descriptors. The software may use the extra padding area for routing or as temporary **storage** for information needed in a **secondary** or later phase of processing. For example, before actually processing the packet, the software may store some data that promotes efficient multi-tasking in the...

...much larger FDDI (Fiber Distributed Data Interface) header. One skilled in the art will recognize the size disparity between these headers. Advantageously, the reserved padding **area** may be **used** for the FDDI header rather than allocating another block of memory. In a present embodiment of the invention DMA engine 120 may determine which category ...

10/3,K/23 (Item 14 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00523342

**METHOD AND APPARATUS FOR MONITORING PLASMA PROCESSING OPERATIONS**  
**PROCEDE ET DISPOSITIF DE SURVEILLANCE DES OPERATIONS DE TRAITEMENT AU PLASMA**

Patent Applicant/Assignee:  
SANDIA CORPORATION,

Inventor(s):  
SMITH Michael Lane Jr,  
STEVENSON Joel O'Don,  
WARD Pamela Denise Peardon,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9954694 A1 19991028

Application: WO 99US8894 19990423 (PCT/WO US9908894)

Priority Application: US 9865203 19980423; US 9864966 19980423; US 9865245 19980423; US 9865006 19980423; US 9865359 19980423; US 9864793 19980423; US 9864957 19980423; US 9865680 19980423; US 9864991 19980423; US 9865257 19980423; US 9865307 19980423; US 9865274 19980423; US 9864970 19980423; US 9865247 19980423; US 9864965 19980423; US 9865195 19980423; US 9865362 19980423; US 9864972 19980423; US 9865358 19980423

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English  
Fulltext Word Count: 122146

Fulltext Availability:  
Detailed Description

Detailed Description

... a comparison of the current optical emissions of the plasma in the chamber with optical emissions of the plasma in the chamber from a previous **time** in the same process, preferably the immediately preceding time at which optical emissions were obtained. In one embodiment, these optical emissions include at least wavelengths...be displayed. such as on a computer monitor or the like for review by operations personnel. From this plot, another plot of the change in **area** of the optical emissions in the second wavelength region over time may be generated. This plot may also be displayed, such as on a computer...main data entries 350. The optical emissions data within the normal spectra subdirectory 288 of Figure 10 may be consolidated or condensed to eliminate the **storage** of **redundant** data, to increase the speed of the search of the normal spectra subdirectory 288 by the current plasma process module 250, or both. Figure 1...



10/3,K/24 (Item 15 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00456834

**A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR SWITCHED TELEPHONY  
COMMUNICATION**  
**SYSTEME PROCEDE ET ARTICLE CONCU POUR LES COMMUNICATIONS TELEPHONIQUES PAR  
RESEAU COMMUTE**

Patent Applicant/Assignee:

MCI WORLDCOM INC,

Inventor(s):

ZEY David A,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9847298 A2 19981022

Application: WO 98US7927 19980415 (PCT/WO US9807927)

Priority Application: US 97835789 19970415; US 97834320 19970415

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN  
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW  
GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK  
ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN  
TD TG

Publication Language: English

Fulltext Word Count: 156638

Fulltext Availability:

Detailed Description

Detailed Description

... Welcome Servers 450 run the daemon in normal as well as secure mode,  
while the Application Servers only run the secure mode daemon.

The Token **Server** (s) run a TCP service that runs on a well known port  
for

ease of connection from within the DMZ. The Token Service daemon uses...

raised above was that of bandwidth usage. Indeed

10 kbps half duplex (a little more when both parties occasionally speak  
at

i 66

the same **time** , but much less during periods of silence) is considerably  
less

than 64 kbps full duplex dedicated capacity. Two points should be noted  
on this argument...can automatically update the User Profile in the  
Directory Service for

the

user who was authenticated, depositing the following information

"User Name" "Account Code" "online **timestamp** "

"Access Device Site Code"

Later, when the Client Computer requires access through an Internet  
Telephony Gateway, it queries the Directory Service 1082 to determine the  
...at 1102, after successful update of the profile associated

with the ID, the directory service sends a response (ACK) back to the  
specified IP address **indicating** that the message was received and

processed. When the computer (PC 12) receives this response message it  
may choose to notify the user via a...at 1202, after successful update of  
the profile associated with the ID, the directory service sends a

response (ACK) back to the specified IP address **indicating**

that the message was received and processed. When the computer (PC 12)

1 5 receives this response message it may choose to notify the user...

which is vulnerable to human error and delay topology

updates. Configuration of these systems usually requires that the system  
be down for a period of **time** . Many systems available in the industry  
are

intended for a particular vendor's PMU 106, and actually obtain topology  
data from their PMUs 106, thereby...

00375280

**STAGGERED STREAM SUPPORT FOR VIDEO ON DEMAND**  
**SUPPORT DE FLUX DECALE POUR VIDEO A LA DEMANDE**

Patent Applicant/Assignee:

EMC CORPORATION,

Inventor(s):

VAHALIA Uresh K,

FORECAST John,

TZELNIC Percy,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9716023 A1 19970501

Application: WO 96US17156 19961028 (PCT/WO US9617156)

Priority Application: US 955988 19951027; US 96661053 19960610

Designated States: AL AM AT AU BA BB BG CA CH CN CU CZ DE DK EE ES FI GB GE

HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ

PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM

AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT

SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 18381

Fulltext Availability:

Claims

**Claim**

... for the track. In this fashion, the track  
can be retained in the cache until it is fetched by the  
process. In step 126 a **time stamp** for the track could also  
be reset to the current time, and used by a background  
process in the ICDA to determine whether any track...MPEG I or MPEG  
II)\*

Second, each stream server PC can be configured with a  
maximum amount of RAM available as a buffer memory. This  
**maximum** amount of memory may **limit** the size of the window on  
a single stream server PC, The number of stream server PCs  
required for storing an entire movie in RAM...not have a free network  
link

that would be needed for satisfying the request. In  
general, a stream server PC has a total buffer memory  
**capacity limitation** and a number of bandwidth limitations.  
The bandwidth limitations include a network bandwidth  
limitation, a throughput or buffer bandwidth limitation, and  
a bus bandwidth limitation...reject the client request. otherwise, in  
step 181, a server window RAM is assigned to the movie, and  
a task is initiated to load this **server** window RAM with  
**duplicate** movie data fetched from the ICDA, If more than  
one stream server PC has an unallocated window, then one of  
these stream servers should be...to FIG. 19, there is shown a schematic  
diagram illustrating the flow of data through the file  
server (20 in FIG. 1) in a "network **backup** " operation, The  
stream **servers** 21 serve to funnel data from clients on the  
network 25 into the integrated cached disk array 23, The  
stream servers accept data at a rate on the order of,  
typically, several megabits per second from each network  
client (as determined by the existing network connections  
and remote **backup** application capabilities). Each stream  
**server** sends data to the integrated cached disk array 23 at  
a rate which is the aggregate of all the streams received by  
the stream server and can be on the order of about fifty to  
5 one hundred megabits per second. The integrated cached **disk**  
**array** in turn sends the **backup** data to the tape silo 24 at  
the rate allowed by the capabilities of the tape silo -  
typically on the order of 2 to 20...South Street, Hopkinton,  
Massachusetts 01748, The backup  
software includes a backup scheduler 201, a volume manager  
202, and a save/restore data mover 203. The **backup** software

in the file **server** (200 in FIG, 1) is adapted from the **Emul**  
(trademark) Hierarchical Storage Management (HSM) software  
by splitting the save/restore data mover 203 from the...the active one of  
the controller servers 28, 29  
to select one of the stream servers to function as a data  
mover. The selected stream **server** moves the **backup** data  
from the network client to allocated tracks in the  
integrated cached disk array. Later, this same stream  
server or another selected stream **server** moves the **backup**  
data from the integrated cached **disk array** to the tape silo,  
When the backup data has been written to allocated disk or  
tape storage, the catalog 204 is updated to indicate that...

File 2:INSPEC 1969-2001/Oct W2  
 (c) 2001 Institution of Electrical Engineers  
 File 8:EI Compendex(R) 1970-2001/Oct W2  
 (c) 2001 Engineering Info. Inc.  
 File 6:NTIS 1964-2001/Oct W4  
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 File 99:Wilson Appl. Sci & Tech Abs 1983-2001/Aug  
 (c) 2001 The HW Wilson Co.  
 File 144:Pascal 1973-2001/Oct W2  
 (c) 2001 INIST/CNRS  
 File 77:Conference Papers Index 1973-2001/Sep  
 (c) 2001 Cambridge Sci Abs  
 File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
 (c) 1998 Inst for Sci Info  
 File 34:SciSearch(R) Cited Ref Sci 1990-2001/Oct W2  
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 (c) 2001 ProQuest Info&Learning  
 File 202:Information Science Abs. 1966-2001/ISSUE 07  
 (c) Information Today, Inc

Set	Items	Description
S1	30788	(BACKUP OR BACK?())UP OR REDUNDAN? OR DUPLICAT? OR REPLACEM- ENT? OR SECONDARY) (5N) (SERVER? OR STORAGE OR DATA OR FILE OR - FILES OR RAID? ? OR DISK(2N)ARRAY?)
S2	78261	TIMESTAMP? OR (TIME(NOT 2N)REAL OR DAY OR DATE OR HOUR? OR MINUTE?) (2N) (STAMP? OR RECORD? OR NOTE? OR NOTING OR MARK??? - OR WRITE? OR WRITING OR WRITTEN OR REGISTER? OR INDICAT?)
S3	1123762	(REACH? OR LIMIT? OR ACHIEV?) (5N) (CAPACITY OR MAXIMUM? OR - UPPER()LIMIT? ?) OR FILL??? OR FULL OR USED()UP
S4	1158617	(SPACE? ? OR AREA? ?) (3N) (FULL OR USED OR FILLED) OR S3
S5	13	S1 AND S2 AND S4
S6	11	RD (unique items)
?		

6/5/1 (Item 1 from file: 2)  
DIALOG(R) File 2:INSPEC  
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01159068 INSPEC Abstract Number: C78005818

**Title: A direct access terabit laser archival memory**

Author(s): Heard, H.G.

Author Affiliation: Inst. for Advanced Computation, Ames Res. Center,  
NASA, Moffett Field, CA, USA

Conference Title: Proceedings on very large data bases p.254-8

Publisher: IEEE, New York, NY, USA

Publication Date: 1977 Country of Publication: USA 570 pp.

Conference Sponsor: ACM; IEEE

Conference Date: 6-8 Oct. 1977 Conference Location: Tokyo, Japan

Language: English Document Type: Conference Paper (PA)

Abstract: This paper addresses recent developments in terabit-level laser archival memory storage technology. The laser memory employs a 500 milliwatt 514.5 nanometer wavelength argon-ion optical laser source to melt permanent bit patterns into a rhodium-coated flexible plastic data storage strip. The same laser, operated at an order of magnitude less power output, is used to read the stored binary data. Information densities of  $2.5 \times 10^7$  bits per square inch are achieved as limited by tracking and beam spot size. Because each data record is permanent, truly archival storage (approximately 25 years) is only limited by dust build-up. Extensive error correction codes enable performance at the  $10^{-10}$  bit error rate level. The system is supported by extensive software that provides call-by-name file access. Operating at peak data rates of 5 megabits/second, the system behaves as an on-line direct-access file, with an on-line capacity equivalent to several thousand 1600 BPI 2400-foot rolls of magnetic tape. Worst case access time to any record is of the order of seconds. Average user-data transfer rates can be as high as 2.86 megabits per second with full data redundancy. (6 Refs)

Subfile: C

Descriptors: optical stores

Identifiers: direct access; terabit; laser archival memory; flexible plastic data storage strip

Class Codes: C5320K (Optical storage); C6120 (File organisation)

6/5/2 (Item 1 from file: 8)  
DIALOG(R) File 8:Ei Compendex(R)  
(c) 2001 Engineering Info. Inc. All rts. reserv.

04580198 E.I. No: EIP96123475977

**Title: Computer-based electronic fall-through probe insect counter for monitoring infestation in stored products**

Author: Shuman, D.; Coffelt, J.A.; Weaver, D.K.

Corporate Source: USDA-Agricultural Research Service, Gainesville, FL, USA

Source: Transactions of the ASAE v 39 n 5 Sep-Oct 1996. p 1773-1780

Publication Year: 1996

CODEN: TAAEAJ ISSN: 0001-2351

Language: English

Document Type: JA; (Journal Article) Treatment: A; (Applications); T; (Theoretical)

Journal Announcement: 9702W2

Abstract: Current commercial infestation monitoring methods for insect pests of stored products are labor intensive, expensive, and insensitive to low population densities. An automated system has been developed to provide continuous monitoring of insects at multiple sites within large volumes of stored products and to remotely display acquired data indicative of infestation levels at these sites. The system uses custom-designed infrared beam sensor heads to detect insects that crawl into and drop through perforated cylindrical tubes (modified commercial grain probe traps) distributed throughout the storage volume. Sensor outputs are transmitted to a computer that analyzes the signals and makes time-stamped records of detections. The software also includes system self-testing, automatic data backup and recovery, and data management utilities. Laboratory

testing across the full range of pertinent species' size resulted in counting accuracy ranging from 88 to 99%. By employing a modular design, the system's size and features can be configured for a variety of applications such as a laboratory instrument, a small farm bin, or a large grain elevator complex. (Author abstract) 12 Refs.

Descriptors: \*Pest control; Food storage; Grain (agricultural product); Probes; Computer aided analysis; Automation; Sensors; Computer software

Identifiers: Computer based electronic fall through probes; Custom designed infrared beam sensor heads; Insect counters

Classification Codes:

461.9.1 (Immunology)

461.9 (Biology); 694.4 (Storage); 822.1 (Food Products Plants & Equipment); 821.4 (Agricultural Products); 723.5 (Computer Applications)

461 (Biotechnology); 694 (Packaging & Storing); 822 (Food Technology); 821 (Agricultural Equipment & Methods); 943 (Mechanical & Miscellaneous Measuring Instruments); 723 (Computer Software)

46 (BIOENGINEERING); 69 (MATERIALS HANDLING); 82 (AGRICULTURE & FOOD TECHNOLOGY); 94 (INSTRUMENTS & MEASUREMENT); 72 (COMPUTERS & DATA PROCESSING)

6/5/3 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

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0566300 NTIS Accession Number: AD-A028 358/0/XAB

**Evaluation of a Diving Log Form to Replace OPNAV Form 9940**

(Final rept)

Carter, R.

Navy Experimental Diving Unit Panama City Fla

Corp. Source Codes: 253650

Report No.: NEDU-2-76

1976 12p

Journal Announcement: GRAI7621

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A02/MF A01

A proposed diving log form and the Standard Navy Diving Log Form (OPNAV 9940) were used by five Navy divers to record eight diving scenarios. The completion time and the number of errors made on each log were recorded. These data were subjected to statistical tests to determine whether the new form was superior. The two diving log forms were identical with respect to the number of errors they evoked from the divers who filled them out. The two forms were also identical with respect to the time required to record simple, no-decompression, and the accident-free diving scenarios. However, the proposed new diving log saved divers an average of 40% of the time required, using OPNAV 9940, to record complex diving scenarios. The proposed diving log form was preferred by the divers because it does not required an inconvenient overlay to aid completion, as does the OPNAV 9940.

Descriptors: Forms(Paper); \*Diving; Records ; Time ; Data acquisition ; Replacement ; Statistical analysis

Identifiers: \*Standard Navy diving log form; Scenarios; NTISDODXA

Section Headings: 88B (Library and Information Sciences--Information Systems)

6/5/4 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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04985234 Genuine Article#: UY203 Number of References: 67

**Title: A CONCERTED TRYPTOPHANYL-ADENYLATE-DEPENDENT CONFORMATIONAL CHANGE IN BACILLUS-SUBTILIS TRYPTOPHANYL-TRANSFER-RNA SYNTHETASE REVEALED BY THE FLUORESCENCE OF TRP92**

Author(s): HOGUE CWV; DOUBLIE S; XUE H; WONG JT; CARTER CW; SZABO AG

Corporate Source: UNIV WINDSOR, DEPT CHEM & BIOCHEM/WINDSOR/ON

N9B3P4/CANADA/; UNIV WINDSOR, DEPT CHEM & BIOCHEM/WINDSOR/ON  
N9B3P4/CANADA/; UNIV OTTAWA, DEPT BIOCHEM/OTTAWA/ON K1N 6M5/CANADA/;  
UNIV N CAROLINA, DEPT BIOCHEM & BIOPHYS CB 7260/CHAPEL HILL/NC/27599;  
UNIV TORONTO, DEPT BIOCHEM/TORONTO/ON M5S 1A8/CANADA/

Journal: JOURNAL OF MOLECULAR BIOLOGY, 1996, V260, N3 (JUL 19), P446-466  
ISSN: 0022-2836

Language: ENGLISH Document Type: ARTICLE

Geographic Location: USA; CANADA

Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences

Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY

Abstract: A semi-conserved tryptophan residue of *Bacillus subtilis* tryptophanyl-tRNA synthetase (TrpRS) was previously asserted to be an essential residue and directly involved in tRNA(Trp) binding and recognition. The crystal structure of the *Bacillus stearothermophilus* TrpRS tryptophanyl-5'-adenylate complex (Trp-AMP) shows that the corresponding Trp91 is buried and in the dimer interface, contrary to the expectations of the earlier assertion. Here we examine the role of this semi-conserved tryptophan residue using fluorescence spectroscopy. *B. subtilis* TrpRS has a single tryptophan residue, Trp92. 4-Fluorotryptophan (4FW) is used as a non-fluorescent substrate analog, allowing characterization of Trp92 fluorescence in the 4-fluorotryptophanyl-5'-adenylate (4FW-AMP) TrpRS complex. Complexation causes the Trp92 fluorescence to become quenched by 70%. Titrations, forming this complex under irreversible conditions, show that this quenching is essentially complete after half of the sites are filled. This indicates that a substrate-dependent mechanism exists for the inter-subunit communication of conformational changes. Trp92 fluorescence is not efficiently quenched by small solutes in either the apo- or complexed form, from this we conclude that this tryptophan residue is not solvent exposed and that binding of the Trp92 to tRNA(Trp) is unlikely.

**Time-resolved fluorescence indicates** conformational heterogeneity of *B. subtilis* Trp92 with the fluorescence decay being best described by three discrete exponential decay times. The decay-associated spectra (DAS) of the apo- and complexed- TrpRS show large variations of the concentration of individual fluorescence decay components. Based on recent correlations of these **data** with changes in the local **secondary** structure of the backbone containing the fluorescent tryptophan residue, we conclude that changes observed in Trp92 time-resolved fluorescence originate primarily from large perturbations of its local secondary structure.

The quenching of Trp92 in the 4FW-AMP complex is best explained by the crystal structure conformation, in which the tryptophan residue is found in an alpha-helix. The amino acid residue cysteine is observed clearly within the quenching radius (3.6 Angstrom) of the conserved tryptophan residue. These tryptophan and cysteine residues are neighbors, one helical turn

Descriptors--Author Keywords: AMINOACYL-TRANSFER-RNA SYNTHETASE ; ENZYME MECHANISM ; TRYPTOPHAN ANALOGS ; CONFORMATIONAL HETEROGENEITY

Identifiers--KeyWords Plus: TRANSFER-RNA-SYNTHETASE; RIBONUCLEIC ACID SYNTHETASE; ESCHERICHIA-COLI; NUCLEOTIDE-SEQUENCE; TRANSFER RNA(TRP); STRUCTURAL GENE; PROTEIN; RESOLUTION; ENZYME; DECAY

Research Fronts: 94-3360 002 (ESCHERICHIA-COLI GLUTAMINYL-TRANSFER-RNA SYNTHETASE; ASSOCIATION OF tRNA(GLN) ACCEPTOR IDENTITY; AMINOACYLATION REACTION)

94-0083 001 (2.8 ANGSTROM RESOLUTION; REFINED CRYSTAL-STRUCTURE; KNOWLEDGE-BASED PROTEIN MODELING)

94-4806 001 (GENE ORGANIZATION; LONG-CHAIN FATTY-ACID TRANSPORT; TRANSCRIPTION FACTOR)

Cited References:

ALA P, 1993, V230, P1089, J MOL BIOL  
ANDREWS D, 1985, V146, P201, EUR J BIOCHEM  
BHATTACHARYA T, 1993, V32, P9268, BIOCHEMISTRY-US  
BHATTACHARYA T, 1991, V200, P739, EUR J BIOCHEM  
BOLLUM FJ, 1966, P296, PROCEDURES NUCLEIC A  
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6/5/5 (Item 2 from file: 34)

DIALOG(R) File 34:SciSearch(R) Cited Ref Sci  
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..Title: 3D-ECHOCARDIOGRAPHY - MATHEMATICAL BASIS AND TECHNICAL REALIZATION

Author(s): WOLLSCHLAGER

Corporate Source: UNIV FREIBURG, MED KLIN, KARDIOL & ANGIOL ABT, HUGSTETTER  
STR 55/D-79106 FREIBURG//GERMANY/

Journal: HERZ, 1995, V20, N4 (AUG), P225-235

ISSN: 0340-9937

Language: GERMAN Document Type: ARTICLE

Geographic Location: GERMANY

Subfile: SciSearch; CC CLIN--Current Contents, Clinical Medicine

Journal Subject Category: CARDIOVASCULAR SYSTEM

Abstract: The ultimate goal of any imaging technique for the investigation of the anatomy of the beating heart is a 3D-display of the cardiac morphology throughout a complete heart cycle. The reason for this interest is quite clear: 3D-imaging has the potential for a better understanding of the individual morphology under normal and pathological conditions and especially, if complex therapeutic decisions have to be made. In the clinical practice, the echocardiographer attempts to obtain a spatial information by a mental reassembling of the 2D echocardiographic images, that are obtained from different imaging planes. This procedure, however, is very subjective and, thus, highly susceptible for errors. Therefore, the 3D-echocardiography has been developed to replace this mental process by an 'objective' and reproducible computerized reconstruction.

Prerequisite for such a 3D-surface reconstruction is a cubic, isotropic digital data set with cubic data volumes, so called 'Voxels' (Figure 1). The term 'isotropic' means, that the resolution is identical in all directions, and that the data density within the cube is homogeneous. Those cubes are the mathematical basis for any SD-reconstruction. At the first step on the way to 3D-images, the data cubes have to be **filled** with 2D echo information. So far, three principal modalities of image acquisition are available for the clinical routine: parallel scanning from the esophagus (Figure 2), rotational scanning (transesophageal - Figure 3a - or transthoracic - Figure 3b).

In all cases, the imaging planes are incremented by an external stepper motor using a dedicated computer logic for gated image acquisition. At the present time, despite geometrical shortcomings, the TEE omniplane probe with rotational scanning is the most widely used system. It can be applied for standard investigations as well as for '3D'-data acquisition after only minor modifications.

The process of 3D-reconstruction is a sequence of repeated steps of image processing. The first step is the elimination of a problem, that is common to all image reconstruction techniques from tomographic information: the imaging planes are **recorded** at different **time** points, and mostly under varying conditions. Although several gating techniques are implemented into the image acquisition, some variability is unavoidable, simply because neither the heart nor the surroundings can be frozen during image acquisition. Therefore, a lot of artifacts (Figure 4) can be introduced by:

variations of the heart rate,

movement of the heart relative to the probe, and

unstability of the transducer.

Some very sophisticated image processing algorithms for the identification, compensation, interpolation, and elimination of those artifacts have been developed and are applied to the acquired sets of 2D images.

The next use of image processing on the way to a 3D-visualization is rather similar: the single imaging planes of the data cubes are recorded at different angles of view, resulting in non-homogeneous data density. This problem is important in rotational scanning (Figure 5): the rotation of the imaging planes around a central axis results in

oversampling of **redundant data** near the axis of rotation and in undersampling in the peripheral parts. After data acquisition, a lot of image processing is needed for the compensation of this non isotropy: **redundant data** have to be eliminated and missing ones have to be interpolated. However, each of these multiple steps of artifact-correction and compensation of inhomogeneous data density means a manipulation of the raw data.

Sometimes, the result may be heavy smoothing of details or even the addition of new pseudo-structures.

After these preprocessing steps, the data cubes can be cut in every direction in real-time, resulting in any desired secondary imaging plane. This can be done without the patient remaining in the echo lab at any time with a dedicated viewing station, where up to 6 different tomographic views can be displayed in motion (Figure 6).

However, the ultimate result of a SD-reconstruction is a perspective view with a realistic surface structure: first, the spatial surface is computed with a so called ray searching technique, i.e. surface points are defined with a sophisticated segmentation process along rays which are constructed through the data cubes (Figure 7). The result is a reconstruction of different surface-layers, which are of only minor interest, because they are far away from the photorealistic perspective we are looking for. Therefore, the data again have to be processed in order to add a shaded surface to the computed structures. During the past few years a lot of software development was done to optimize the steps of surface shading to achieve a realistic impression of the anatomical details. So far, three basic methods for surface shading of the reconstructed images are available:

Distance shading results in rather smooth surfaces with few structural details, but gives an excellent spatial impression (Figure 8a).

Gradient shading - which simulates an electronically illumination - results in quite realistic and detailed views, but is highly susceptible to artifacts in the raw data (Figure 8b), and the Spatial texture method where a surface is computed which retains the characteristic appearance of echo images (Figure 8c).

None of these shading techniques is appropriate and optimal for all cases. Therefore, an individually weighted addition of the three surface shading techniques is the way to get realistic results (Figure 8d). The amount of each of the three surface components has to be selected individually, depending on the image characteristics of the single case.

This new technique of 3D-echocardiography allows for the generation of impressive new views of the beating heart. However, despite of all the fascination, the clinician always has to keep in mind some important limitations:

3D-echocardiographic views are always synthetic, computed images and are the result of repeated steps of image processing. Thus, these views are susceptible to artifacts and overmanipulation and have to be interpreted with caution. This is of special importance, because

an anesthesiologically impressive result of a 3D-reconstruction is possible even from data sets with low quality (Figure 9).

The medical quality of the reconstructed images, however, depends only on the quality of the raw data. Therefore, the echocardiographer has to be familiar with the methods and problems of image acquisition, image processing, and image reconstruction to estimate the quality of the data set and thus, the clinical relevance of the SD-results.

Identifiers--KeyWords Plus: ECHOCARDIOGRAPHY

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6/5/6 (Item 1 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00429054 96WN07-033

**Leisurely drive ensures safe data: TEAC Tapel600**

Methvin, David W

Windows Magazine , July 1, 1996 , v7 n7 p144, 1 Page(s)

ISSN: 060-1066

Company Name: TEAC America

Product Name: TEAC Tapel600

Languages: English

Document Type: Hardware Review

Grade (of Product Reviewed): B

Hardware/Software Compatibility: IBM PC Compatible; Microsoft Windows;  
Microsoft Windows 95

Geographic Location: United States

Presents a favorable review of the TEAC Tapel600 (\$179), a tape drive from TEAC America (213). Runs with IBM PC compatibles with Windows 3.1x or 95. Indicates that the TEAC Tapel600 installs easily into an internal 3.5-inch or 5.25-inch bay, and it offers 800MB capacity using uncompressed data, and up to 1.6GB of compressed data. Comes with Arcada **Backup** software, and notes that under Windows 95, this program can save and restore your Registry. Reports that a **full backup** of 11,099 files containing 681MB of data took one hour, 33 minutes, and a selective restore of 529 files with 79MB of data required 16 **minutes**. **Notes** that the TEAC Tapel600 package includes a cable that plugs directly into the floppy controller, which makes it much more flexible to hook up the tape drive and floppy drive. Rates the TEAC Tapel600 three out of five Windows. Includes a product summary. (jo)

Descriptors: Tape Drive; **Backup** ; Hardware Review; Information  
**Storage**

Identifiers: TEAC Tapel600; TEAC America

6/5/7 (Item 2 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00170477 88PW06-014

**Background backup**

Hogan, Mike

PC World , June 1, 1988 , v6 n6 p107-108, 2 Pages

ISSN: 0737-8939

Languages: English

Document Type: Product Announcement

Hardware/Software Compatibility: IBM PC; IBM PC Compatible

Geographic Location: United States

Announces two **data backup** products from Digital **Storage** Systems of Longmont, CO (800, 303): the ARC 6500 (\$595), a tape controller card, requiring a **full** -length 8-bit slot, which automatically performs an incremental **backup** of **data** each **time** the computer **writes** to disk,

..and supports usual search, retrieve, and catalogue functions; and the ARC 7000 (\$995), an internal tape subsystem which performs the same functions as the ARC6500. Both products are equipped with NonStop software. Contains one photo. (djd)

Descriptors: Backup; Expansion Board; Tape Drive

Identifiers: ARC 6500; ARC 7000; Digital Storage Systems

6/5/8 (Item 1 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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01730213 ORDER NO: AADAA-I9937278

**Dual-reference-beam holographic particle image velocimetry**

Author: Sholes, Kevin R.

Degree: Ph.D.

Year: 1999

Corporate Source/Institution: The University of Wisconsin - Madison (0262)

Supervisor: Patrick V. Farrell

Source: VOLUME 61/01-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 497. 132 PAGES

Descriptors: ENGINEERING, MECHANICAL ; PHYSICS, OPTICS

Descriptor Codes: 0548; 0752

A new holographic particle image velocimetry system (HPIV) is proposed for measuring internal combustion engine in-cylinder turbulence. The nature of in-cylinder turbulence requires a **full** -field measurement device capable of 3-D resolution with no directional preference and without reliance on an assumed flow direction. The proposed system achieves these requirements by recording two holograms with perpendicular views. Each is a dual-reference-beam hologram recording two independent images of the particle-seeded flow field with a specified separation **time** between **recordings**. A fully automated interrogation system determines the mean displacements of local groups of particles throughout the recorded volume with a spatial resolution of 1 mm in each direction. Interrogation of each hologram yields the two components of velocity transverse to the hologram optical axis. The data from both holograms are combined to obtain three vector components at each location, with one component measured **redundantly**. Particular attention to **data** validation during the interrogation procedures eliminates the need for post-processing to eliminate erroneous vectors. A thorough analysis is presented of the sensitivity of HPIV to optical misalignment. The analysis concludes that dual-reference-beam systems are particularly vulnerable to both misalignments of the reconstruction beams and hologram repositioning accuracy. Recording a reference object for later image registration is necessary to recover system accuracy. Results are presented for turbulence measurement in a square tank.

6/5/9 (Item 2 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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01596884 ORDER NO: AAD98-00699

**THE FEASIBILITY OF ESTABLISHING A SECONDARY MORTGAGE MARKET TO IMPROVE THE LIQUIDITY AND AVAILABILITY OF HOUSING FINANCE FUNDS IN TAIWAN (CHINA)**

Author: CHANG, GUANGDI

Degree: PH.D.

Year: 1997

Corporate Source/Institution: TEXAS A&M UNIVERSITY (0803)

Chair: ARTHUR L. SULLIVAN

Source: VOLUME 58/07-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 2775. 224 PAGES

Descriptors: ECONOMICS, FINANCE ; URBAN AND REGIONAL PLANNING ; BUSINESS ADMINISTRATION, BANKING

Descriptor Codes: 0508; 0999; 0770

The purpose of this search is to investigate the feasibility of establishing a secondary mortgage market in Taiwan to improve the liquidity and availability of housing finance funds. The government of Taiwan estimated that some 820,000 flats that builders had sold to investors stood empty in 1995. The problem of the oversupplied housing has made the three markets of savings deposits, mortgages, and housing to interact simultaneously.

A three-market, six-equation simulation model is derived from the related literature and Taiwan's socio-economic, financial, and housing context. An independent policy variable (IPV) is designed to measure the impacts of the government holdings of **secondary** mortgages. The main source of **data** for this research is quarterly data for the period 1985 to 1994 from the reports published by Taiwan's government and quasi-government agencies.

A single-equation multiple regression analysis is first used to test the significance of variables. A simulation analysis is then utilized to test the research hypotheses and the effects of the independent policy variable on the three markets. Results of the analysis indicate that the ascending government holdings of secondary mortgages produce more significant results than do the constant and descending government holding cases. The experiment of the ascending government holdings is 2 percent increment of the government holdings of presumed secondary mortgages for every quarter until the **maximum** of 50 percent is **reached** and maintained for the rest of the **time**. The three **markets** respond to the significance of the ascending government holdings with more passbook savings, more mortgage flow, lower passbook savings rate, and lower mortgage rate.

The findings of this research have demonstrated that the ascending government holdings will make purchasing houses more affordable to potential homebuyers in the oversupplied housing market and make the housing finance delivery system more competitive and effective. It is concluded that establishing a secondary mortgage market will benefit the participants in the three markets and improve the availability and liquidity of housing finance funds. Therefore, it is recommended that a secondary mortgage market be established and the ascending government holdings be arranged by a fully responsible government agency.

6/5/10 (Item 3 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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0965898 ORDER NO: AAD87-22395

**A COMPARATIVE ANALYSIS OF CONSUMER DEMAND FOR MACADAMIA NUTS IN HONOLULU AND LOS ANGELES (HAWAII; CALIFORNIA)**

Author: SURONO, SULASTRI SUMARNO

Degree: PH.D

Year: 1987

Corporate Source/Institution: UNIVERSITY OF HAWAII (0085)

Source: VOLUME 48/07-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1844. 138 PAGES

Descriptors: ECONOMICS, AGRICULTURAL

Descriptor Codes: 0503

This study addresses the comparative demand for macadamia nuts in Los Angeles and Honolulu and the utilization of these relationships to estimate the Los Angeles market potential for the product. The need for assessing markets outside of Hawaii is crucial in face of rapidly expanding Hawaii production and near saturation of the Honolulu market. Los Angeles is the major market for macadamia nuts on the mainland and as such it is a suitable place to conduct an indepth analysis of consumer demand for the product.

Demand determinants for macadamia nuts in Honolulu (developed market) and Los Angeles (lesser developed market) are estimated through regression analysis from random sample household surveys of 1509 respondents conducted in each of the two cities. Economic as well as non-economic variables are included in the specified model. Economic variables considered were per capita income, own price and price of macadamia nuts in relation to other nuts. The non-economic determinants were age, education and ethnic

background of the primary shopper. Age and ethnic background and price of macadamia nuts in relation to other nuts were found to be statistically insignificant and were dropped from the model. The analysis utilizes per capita purchases of macadamia nuts as the dependent variable, with separate regressions of the purchases for home consumption and for gifts.

The study attempts to refine the methodology for estimating market potentials for new food products in partially developed markets through their demand relationships to developed markets as obtained from household surveys. Estimation of the Los Angeles market potential for macadamia nuts incorporates the ratio of certain estimated parameters in Honolulu and Los Angeles as potential demand determinants. The estimated parameters from the regression combined with information from the survey and **secondary data** constitute the elements of the specified formula. Market prediction for Los Angeles estimates that potential sales of macadamia nuts would have amounted to 0.18 pound per capita in 1985 if the market had been fully developed under **full** distribution at that time. The estimated **market** potential is 7.2 greater than estimated actual sales of 0.025 pound per capita in 1985. This suggests an excellent opportunity for expanding sales of the product in Los Angeles through further market development.

6/5/11 (Item 4 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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878577 ORDER NO: AAD85-08253

**AN EVALUATION OF THE INSTRUCTIONAL EFFECTIVENESS OF PART-TIME COMMUNITY COLLEGE DEVELOPMENTAL WRITING FACULTY (CALIFORNIA, ACHIEVEMENT, PERSISTENCE)**

Author: BOGGS, GEORGE ROBERT

Degree: PH.D.

Year: 1984

Corporate Source/Institution: THE UNIVERSITY OF TEXAS AT AUSTIN (0227)

Source: VOLUME 46/02-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 335. 190 PAGES

Descriptors: EDUCATION, COMMUNITY COLLEGE

Descriptor Codes: 0275

The increased utilization of part-time faculty in American community colleges has resulted in serious questions about the quality of instruction delivered. The purpose of this study was to address these concerns by examining the comparative effectiveness of part- and **full -time** developmental **writing** faculty at a comprehensive, public community college in California. Measures of effectiveness were successful completion of students, and student persistence to course completion and grade achievement in a subsequent freshman composition course.

Data were collected to form two data files. The primary file contains information on 3497 cases of students who enrolled in freshman composition at Butte College from Winter quarter 1979 through Fall quarter 1983. This file contains information on student grade achievement and persistence to course completion, as well as the part- or **full -time** status of the instructors who taught freshman composition and the previous developmental writing class (if taken). In addition, the primary data file includes information on other factors which were identified as potentially influencing student persistence and achievement.

The **secondary data file** is comprised of 191 cases of developmental writing classes which enrolled 3955 students from the Fall quarter of 1975 through Summer Session 1983. Schedule, instructor, and grade assignment data were collected, recorded, and analyzed. Despite evidence provided in the literature that institutional practices with regard to part-time instructors could, and probably should, be improved, part-times in this study were found to be at least as effective as their **full -time** counterparts. Not only were part- and **full -time** developmental **writing** instructors equally effective in terms of successful completion of their students, but their students also went on to achieve about equal grades in the subsequent composition class. In fact, part-timers were slightly, but not significantly, more effective than **full -timers** in terms of persistence of their students in a subsequent freshman

composition class.

In a related finding, part-time freshman composition students in this study showed significantly higher grade achievement and persistence, as well as fewer instances of course repetition, if they took the course from a part-time rather than a **full** -time instructor.

6/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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05927714 Supplier Number: 53167684 (USE FORMAT 7 FOR FULLTEXT)  
**Storage: Western Digital Announces One of Industry's First Ultra ATA/66 Hard Drives, the WD Caviar 13.0 GB, With Leading Time-to-Market 4.3 GB Per Platter Areal Density Outperforms competitive products by 25 to 35 percent. (Product Announcement)**

EDGE: Work-Group Computing Report, pNA  
Nov 2, 1998  
Language: English Record Type: Fulltext  
Article Type: Product Announcement  
Document Type: Newsletter; Trade  
Word Count: 710

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...is \$339. The new hard drive carries a three-year limited warranty. "With the dramatic increase in areal density growth in the past several years, **time -to-market** and volume-to-market execution has become mandatory for all drive makers," said John Monroe, chief analyst for rigid disk drives at Dataquest. "In spite...

...user of potential hard drive failure when enabled. The Ultra ATA/66 interface enhances data integrity through improved timing margins and the use of Cyclical **Redundancy** Check (CRC), a **data** protection system that helps assure the integrity of transferred data. The interface allows host computers to send and retrieve faster, removing bottlenecks associated with data...

...to break the 8.4 GB hard drive limitation on some traditional system BIOSs. The use of EZ-Drive, version 9.09W, will support the **full capacity** of drives greater than 8.4 GB by overcoming operating systems and system BIOS limitations, while offering the end users ease-of-installation and the...

6/3,K/2 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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02959024 Supplier Number: 44005498 (USE FORMAT 7 FOR FULLTEXT)

**NETWORK BACKUP**

VARbusiness, p140  
August, 1993  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 1441

... the goal is to get the network up and running quickly.  
There are a number of variations of the incremental/full backup combination. A differential **backup** each **day** **records** all the **files** that have been changed since the last full backup. The differential grows in size daily, but a restoration will involve the last full backup and the last differential only. An adjusted full backup limits the number of times an unchanged file is copied. This reduces the time spent doing **full** backups.

The one **area** that has matured to the point where there is some structure are the devices used for storage. There are at least six choices: floppy disks...

6/3,K/3 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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02408079 SUPPLIER NUMBER: 62652933 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Special Report: Inside Windows Me Beta 3. (News Briefs)**  
Finnie, Scot; Methvin, Dave  
WinMag.com, NA  
May 4, 2000  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 7234 LINE COUNT: 00539

TEXT:

...200MB when SR is turned on, it will temporarily self-disable until free space climbs back above 200MB. You can change the amount of disk **space used** for SR, or manually enable/disable the feature on the Start > Settings > Control Panel > System > Performance > File System dialog. Nearby on the "Troubleshooting" tab, you...file reappeared in the folder. When I checked SFPLOG.TXT, it indicated that SFP had replaced the file. Impressive. I did notice, however, that the **replacement file** had a modification date of the current date, instead of the original file date. That's either a bug or a feature, depending on how...own movie. Movie Maker's best features don't immediately meet the eye. Microsoft is using its streaming video format, .ASF, which it says can **record** nearly 24-**hours** of audio and video in 1GB of hard disk space. That's at Movie Maker's "Medium" recording quality. You'll definitely notice some loss...

6/3,K/4 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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01531117 SUPPLIER NUMBER: 12561455 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**The network name feedlot: Net Worth. (Domain Name Systems directory to computer networks) (Tutorial) (Column)**  
Baker, Steven  
UNIX Review, v10, n9, p13(8)  
Sept, 1992  
DOCUMENT TYPE: Column ISSN: 0742-3136 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 3095 LINE COUNT: 00241

... 9,999 after the decimal point. A reasonable format incorporating the month, day, and year is:

yymm.dd[00-99]

The next, three SOA fields **indicate** the **time** in seconds a **secondary name server** should take to check with a primaryname server to refresh (check for an update), retry after a refresh failure, and the **upper limit** to expire data if a refresh can't be processed. The final minimum field is the default time in seconds to be used for the...

9/3,K/1 (Item 1 from File: 275)

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01549298 SUPPLIER NUMBER: 13229254 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Bulletin boards. (computer BBSs)**

Computer Shopper, v12, n12, p765(44)

Dec, 1992

ISSN: 0886-0556

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 73106 LINE COUNT: 05573

... a MS-DOS 80486; 1,000Mb running PCBoard 14.5a/E6 with Anchor at up to 2,400 bps. Established 11/90; no fee. Free **full** access on first call! Over 1Gb of the latest software.

California \* 916

Berry Creek 589-4929. Time Bender-Long BBS with sysop Terral Jamison. 1...Established 04/91; fee of \$10 annually. NW Florida's premier BBS. Many message bases including adult areas. Shareware Distribution Net.

Inverness 637-3713. Prime **Time** with sysop **Mark** Beaubien. 1 line operating on a MS-DOS 80286; 142Mb running Searchlight 2.15c with US Robotics at up to 9,600 bps. Established 07...

File 16:Gale Group PROMT(R) 1990-2001/Oct 15  
     (c) 2001 The Gale Group  
 File 160:Gale Group PROMT(R) 1972-1989  
     (c) 1999 The Gale Group  
 File 148:Gale Group Trade & Industry DB 1976-2001/Oct 15  
     (c)2001 The Gale Group  
 File 621:Gale Group New Prod.Annou.(R) 1985-2001/Oct 15  
     (c) 2001 The Gale Group  
 File 636:Gale Group Newsletter DB(TM) 1987-2001/Oct 15  
     (c) 2001 The Gale Group  
 File 88:Gale Group Business A.R.T.S. 1976-2001/Oct 16  
     (c) 2001 The Gale Group  
 File 47:Gale Group Magazine DB(TM) 1959-2001/Oct 15  
     (c) 2001 The Gale group  
 File 111:TGG Natl.Newspaper Index(SM) 1979-2001/Oct 12  
     (c) 2001 The Gale Group  
 File 275:Gale Group Computer DB(TM) 1983-2001/Oct 12  
     (c) 2001 The Gale Group

Set	Items	Description
S1	131003	(BACKUP OR BACK?()UP OR REDUNDAN? OR DUPLICAT? OR REPLACEM- ENT? OR SECONDARY)(5N)(SERVER? OR STORAGE OR DATA OR FILE OR - FILES OR RAID? ? OR DISK(2N)ARRAY?)
S2	548621	TIMESTAMP? OR (TIME(NOT 2N)REAL OR DAY OR DATE OR HOUR? OR MINUTE?)(2N)(STAMP? OR RECORD? OR NOTE? OR NOTING OR MARK??? - OR WRITE? OR WRITING OR WRITTEN OR REGISTER? OR INDICAT?)
S3	190758	(REACH? OR LIMIT? OR ACHIEV? OR FULL OR FILL??? OR (USED OR USING)()UP)(5N)(CAPACITY OR MAXIM? OR UPPER(1W)LIMIT? ?)
S4	266626	(SPACE? ? OR AREA? ?)(3N)(FULL OR USED OR FILLED) OR S3
S5	7	S1(S)S2(S)S4
S6	4	RD (unique items)
S7	35109	ARCHIV?(3N)(SERVER? OR STORAGE OR DATA OR FILE OR FILES OR RAID? ? OR DISK(2N)ARRAY?)
S8	1	S7(S)S2(S)S4
S9	1	S8 NOT S5

6/3,K/1 (Item 1 from file: 16)  
DIALOG(R) File 16:Gale Group PROMT(R)  
(c) 2001 The Gale Group. All rts. reserv.

05927714 Supplier Number: 53167684 (USE FORMAT 7 FOR FULLTEXT)  
**Storage: Western Digital Announces One of Industry's First Ultra ATA/66  
Hard Drives, the WD Caviar 13.0 GB, With Leading Time-to-Market 4.3 GB  
Per Platter Areal Density Outperforms competitive products by 25 to 35  
percent. (Product Announcement)**

EDGE: Work-Group Computing Report, pNA  
Nov 2, 1998  
Language: English Record Type: Fulltext  
Article Type: Product Announcement  
Document Type: Newsletter; Trade  
Word Count: 710

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...is \$339. The new hard drive carries a three-year limited warranty. "With the dramatic increase in areal density growth in the past several years, **time -to-market** and volume-to-market execution has become mandatory for all drive makers," said John Monroe, chief analyst for rigid disk drives at Dataquest. "In spite...

...user of potential hard drive failure when enabled. The Ultra ATA/66 interface enhances data integrity through improved timing margins and the use of Cyclical **Redundancy** Check (CRC), a **data** protection system that helps assure the integrity of transferred data. The interface allows host computers to send and retrieve faster, removing bottlenecks associated with data...

...to break the 8.4 GB hard drive limitation on some traditional system BIOSs. The use of EZ-Drive, version 9.09W, will support the **full capacity** of drives greater than 8.4 GB by overcoming operating systems and system BIOS limitations, while offering the end users ease-of-installation and the...

6/3,K/2 (Item 2 from file: 16)  
DIALOG(R) File 16:Gale Group PROMT(R)  
(c) 2001 The Gale Group. All rts. reserv.

02959024 Supplier Number: 44005498 (USE FORMAT 7 FOR FULLTEXT)

**NETWORK BACKUP**

VARbusiness, pl40  
August, 1993  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 1441

... the goal is to get the network up and running quickly.  
There are a number of variations of the incremental/full backup combination. A differential **backup** each **day** **records** all the **files** that have been changed since the last full backup. The differential grows in size daily, but a restoration will involve the last full backup and the last differential only. An adjusted full backup limits the number of times an unchanged file is copied. This reduces the time spent doing **full** backups.

The one **area** that has matured to the point where there is some structure are the devices used for storage. There are at least six choices: floppy disks...

6/3,K/3 (Item 1 from file: 275)  
DIALOG(R) File 275:Gale Group Computer DB(TM)  
(c) 2001 The Gale Group. All rts. reserv.

.02408079      SUPPLIER NUMBER: 62652933      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Special Report: Inside Windows Me Beta 3. (News Briefs)**  
Finnie, Scot; Methvin, Dave  
WinMag.com, NA  
May 4, 2000  
LANGUAGE: English      RECORD TYPE: Fulltext  
WORD COUNT: 7234      LINE COUNT: 00539

TEXT:

...200MB when SR is turned on, it will temporarily self-disable until free space climbs back above 200MB. You can change the amount of disk **space used** for SR, or manually enable/disable the feature on the Start > Settings > Control Panel > System > Performance > File System dialog. Nearby on the "Troubleshooting" tab, you...file reappeared in the folder. When I checked SFPLOG.TXT, it indicated that SFP had replaced the file. Impressive. I did notice, however, that the **replacement file** had a modification date of the current date, instead of the original file date. That's either a bug or a feature, depending on how...own movie. Movie Maker's best features don't immediately meet the eye. Microsoft is using its streaming video format, .ASF, which it says can **record** nearly 24-**hours** of audio and video in 1GB of hard disk space. That's at Movie Maker's "Medium" recording quality. You'll definitely notice some loss...

6/3,K/4      (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2001 The Gale Group. All rts. reserv.

01531117      SUPPLIER NUMBER: 12561455      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**The network name feedlot: Net Worth. (Domain Name Systems directory to computer networks) (Tutorial) (Column)**  
Baker, Steven  
UNIX Review, v10, n9, p13(8)  
Sept, 1992  
DOCUMENT TYPE: Column      ISSN: 0742-3136      LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 3095      LINE COUNT: 00241

... 9,999 after the decimal point. A reasonable format incorporating the month, day, and year is:

yyymm.dd[00-99]

The next, three SOA fields **indicate** the **time** in seconds a **secondary** name **server** should take to check with a primaryname server to refresh (check for an update), retry after a refresh failure, and the **upper limit** to expire data if a refresh can't be processed. The final minimum field is the default time in seconds to be used for the...

9/3,K/1 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2001 The Gale Group. All rts. reserv.

01549298 SUPPLIER NUMBER: 13229254 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Bulletin boards. (computer BBSs)**

Computer Shopper, v12, n12, p765(44)

Dec, 1992

ISSN: 0886-0556 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 73106 LINE COUNT: 05573

... a MS-DOS 80486; 1,000Mb running PCBoard 14.5a/E6 with Anchor at up to 2,400 bps. Established 11/90; no fee. Free **full** access on first call! Over 1Gb of the latest software.

California \* 916

Berry Creek 589-4929. Time Bender-Long BBS with sysop Terral Jamison. 1...Established 04/91; fee of \$10 annually. NW Florida's premier BBS. Many message bases including adult areas. Shareware Distribution Net.

Inverness 637-3713. Prime **Time** with sysop **Mark** Beaubien. 1 line operating on a MS-DOS 80286; 142Mb running Searchlight 2.15c with US Robotics at up to 9,600 bps. Established 07...

File 15:ABI/Inform(R) 1975-2001/Oct 16  
(c) 2001 ProQuest Info&Learning  
File 98:General Sci Abs/Full-Text 1984-2001/Sep  
(c) 2001 The HW Wilson Co.  
File 674:Computer News Fulltext 1989-2001/Oct W1  
(c) 2001 IDG Communications  
File 624:McGraw-Hill Publications 1985-2001/Oct 16  
(c) 2001 McGraw-Hill Co. Inc  
File 9:Business & Industry(R) Jul/1994-2001/Oct 16  
(c) 2001 Resp. DB Svcs.  
File 75:TGG Management Contents(R) 86-2001/Oct W1  
(c) 2001 The Gale Group  
File 370:Science 1996-1999/Jul W3  
(c) 1999 AAAS  
File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
File 612:Japan Economic Newswire(TM) 1984-2001/Oct 15  
(c) 2001 Kyodo News  
File 635:Business Dateline(R) 1985-2001/Oct 16  
(c) 2001 ProQuest Info&Learning  
File 484:Periodical Abs Plustext 1986-2001/Sep W3  
(c) 2001 ProQuest  
File 647:CMP Computer Fulltext 1988-2001/Oct W1  
(c) 2001 CMP Media, LLC  
File 623:BUSINESS WEEK 1985-2001/OCT W1  
(c) 2001 THE MCGRAW-HILL COMPANIES INC  
File 20:World Reporter 1997-2001/Oct 17  
(c) 2001 The Dialog Corporation

Set	Items	Description
S1	67115	(BACKUP OR BACK?())UP OR REDUNDAN? OR DUPLICAT? OR REPLACEM- ENT? OR SECONDARY) (5N) (SERVER? OR STORAGE OR DATA OR FILE OR - FILES OR RAID? ? OR DISK(2N)ARRAY?)
S2	479293	TIMESTAMP? OR (TIME(NOT 2N)REAL OR DAY OR DATE OR HOUR? OR MINUTE?) (2N) (STAMP? OR RECORD? OR NOTE? OR NOTING OR MARK??? - OR WRITE? OR WRITING OR WRITTEN OR REGISTER? OR INDICAT?)
S3	151410	(REACH? OR LIMIT? OR ACHIEV? OR FULL OR FILL??? OR (USED OR USING) (UP) (5N) (CAPACITY OR MAXIM? OR UPPER(1W)LIMIT? ?)
S4	211869	(SPACE? ? OR AREA? ?) (3N) (FULL OR USED OR FILLED) OR S3
S5	2	S1(S)S2(S)S4
S6	2	RD (unique items)
S7	18022	ARCHIV?(3N) (SERVER? OR STORAGE OR DATA OR FILE OR FILES OR RAID? ? OR DISK(2N)ARRAY?)
S8	1	S7(S)S2(S)S4
S9	0	S8 NOT S6

6/3,K/1 (Item 1 from file: 635)

DIALOG(R)File 635:Business Dateline(R)

(c) 2001 ProQuest Info&Learning. All rts. reserv.

0682573 96-39791

**Tandberg Data announces TDS 1000 Series library systems based on its new 13 GB TDC 6100 QIC tape drive**

Vu, Theresa

Business Wire (San Francisco, CA, US) p1

PUBL DATE: 960315

WORD COUNT: 698

DATELINE: Simi Valley, CA, US, Pacific

TEXT:

...TDC 6100 data cartridge drive. The 13 GB native capacity drive uses multichannel linear recording techniques (MLR) and a 144-track thin film head to **achieve** a **capacity** increase over the company's prior DC6000 products by a factor of more than four to one.

The drive has been in development for more...

...Oslo, Norway, facility. "We have really been 'pushing the envelope' with this new technology for the 13 GB drive," Severa said. "We probably underestimated the **time** to **market** with regard to head technology, mechanics and circuitry."

"When doubling, tripling and even increasing drive capacities by more than four times as we have done...

...up to 180 megabytes-per-minute transfer rates and uses a newly developed 144-track thin-film head design and 13 GB tape media to **achieve** an uncompressed **capacity** of 13 GB."

"We will be shipping library systems for evaluation to selected OEM customers in May with anticipated first production-level units to our...

...a pioneer in streaming tape technology and is the leading worldwide supplier of high-speed, high-capacity QIC tape drives and related products for computer **backup**, archival **storage** and software distribution.

Major OEM customers include IBM, Sun Microsystems, Digital Equipment Corp., H.P.'s Colorado Memory Systems division and AT&T. Tandberg Data...

6/3,K/2 (Item 1 from file: 647)

DIALOG(R)File 647:CMP Computer Fulltext

(c) 2001 CMP Media, LLC. All rts. reserv.

00545823 CMP ACCESSION NUMBER: VAR19930801S4180

**NETWORK BACKUP - Playing Catch-Up to the Growth in LANs** (Market Report)

Cassimir Medford

VARBUSINESS, 1993, n 911, 140

PUBLICATION DATE: 930801

JOURNAL CODE: VAR LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: Business

WORD COUNT: 1448

... the goal is to get the network up and running quickly.

There are a number of variations of the incremental/full backup combination. A differential **backup** each **day** **records** all the **files** that have been changed since the last full backup. The differential grows in size daily, but a restoration will involve the last full backup and the last differential only. An adjusted full backup limits the number of times an unchanged file is copied. This reduces the time spent doing **full** backups.

The one **area** that has matured to the point where there is some



structure are the devices used for storage. There are at least six  
choices: floppy disks...  
?

File 350:Derwent WPIX 1968-2001/UD,UM &UP=200143  
(c) 2001 Derwent Info Ltd  
File 347:JAPIO OCT 1976-2001/Mar(UPDATED 010705)  
(c) 2001 JPO & JAPIO  
File 344:CHINESE PATENTS ABS APR 1985-2001/Jun  
(c) 2001 EUROPEAN PATENT OFFICE

Set	Items	Description
S1	9375	(LONG()TERM OR PERMANENT OR ARCHIV?) (10N) (STORAGE? OR MEMORY OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY? (2W) (DISK? ? OR DISC? ?)
S2	18460	(SERVER? OR DATA OR FILE OR FILES) (5N) (BACKUP? OR BACK??? (-)UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR SECONDARY)
S3	133899	(COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR CONTROLLED OR MANAG? OR INTEGRAT?) (15N) (PROCESSOR? OR CPU OR CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI) (3N) - (DATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))
S4	148502	(COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST??? OR INDICAT? OR REGISTER? OR MARK??? OR EXAMIN?) (5N) (TIME? OR HOUR?? ? OR MINUTE? ? OR INTERVAL?)
S5	1137511	CAPACIT? OR LIMIT? OR MAXIMUM?
S6	841	(TAPE? OR CARTRIDGE?) (5N) (COLLECTION? OR LIBRAR? OR CAROUSEL? OR AUTOMATION()SYSTEM?)
S7	138628	ROBOT? OR CYBERNET? OR AUTOMATE?
S8	0	S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7
S9	0	(S1 OR S2) AND S3 AND S4 AND S5 AND (S6 OR LIBRAR??? OR S7)
S10	7	(S1 OR S2) AND S3 AND S4 AND S5
S11	0	(MASS()STORAGE OR S6) AND S3 AND S4 AND S5
S12	0	(MASS()STORAGE OR S1 OR S2) AND S3 AND S5 AND TIME AND (S6 OR LIBRAR???)
S13	54	(MASS()STORAGE OR S1 OR S2) AND S3 AND S5 AND TIME
S14	0	S13 AND (S6 OR LIBRAR? OR S7)
S15	4	(MASS()STORAGE OR S1 OR S2) AND S3 AND S5 AND TIME (5N) SIGNAL????
S16	3	S15 NOT S10
S17	0	S1 AND S2 AND S3 AND S4
S18	0	(S1 AND S2) AND S3 AND S4

10/5/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2001 Derwent Info Ltd. All rts. reserv.

013133980 \*\*Image available\*\*  
WPI Acc No: 2000-305851/200027  
XRPX Acc No: N00-228693

Information storage system having function of copying or compressing and storing updated data as secondary data among one or more control units has control module for comparing difference between latest write time and oldest write time

Patent Assignee: HITACHI LTD (HITA ); HITACHI SOFTWARE ENG CO LTD (HISF )  
Inventor: KIMURA T; KOIDE T; NAGASAWA T; SAITSU Y  
Number of Countries: 026 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 997817	A2	20000503	EP 99121269	A	19991025	200027 B
JP 2000137638	A	20000516	JP 98324543	A	19981029	200032

Priority Applications (No Type Date): JP 98324543 A 19981029

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 997817	A2	E 13	G06F-011/14	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI				
JP 2000137638	A	14	G06F-012/00	

Abstract (Basic): EP 997817 A2

NOVELTY - A master **control** unit (105) receives a data write request from an information **processor** (100). A storing unit (110) connected to the master **control** unit (105). The **control** unit (105) has a control module (401) for comparing the difference between the latest write time (337) and the oldest write time (336) in a group of write data which has not been transferred to a remote control unit (115) with a preset allowance time (335).

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for:

(a) a data transfer method of an information storage system

USE - In an information storage system having the function of copying or compressing and storing updated **data** as **secondary data** among one or more control units.

ADVANTAGE - Assures not only consistency of data but also the **limit** of the assurance from various points of view, and to assure significance of the consistency of data by assuring and maintaining the data consistency within the range expected by the user.

DESCRIPTION OF DRAWING(S) - The drawing shows a process flow in a first embodiment of the present invention.

information processor (100)  
master control unit (105)  
storing unit (110)  
remote control unit (115)  
preset allowance time (335)  
oldest write time (336)  
latest write time (337)  
control module (401)

pp; 13 DwgNo 4/7

Title Terms: INFORMATION; STORAGE; SYSTEM; FUNCTION; COPY; COMPRESS;  
STORAGE; UPDATE; DATA; SECONDARY; DATA; ONE; MORE; CONTROL; UNIT; CONTROL  
; MODULE; COMPARE; DIFFER; LATE; WRITING; TIME; WRITING; TIME

Derwent Class: T01; U21

International Patent Class (Main): G06F-011/14; G06F-012/00

File Segment: EPI

10/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2001 Derwent Info Ltd. All rts. reserv.

009065221    \*\*Image available\*\*

WPI Acc No: 1992-192610/199224

XRPX Acc No: N92-145442

**Data storage in memory for document production - has extensive operator input error checking and data verification with display of input data**

Patent Assignee: NORTON HOLDINGS LTD (NORT-N)

Inventor: HENEY J

Number of Countries: 002    Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
BE 1003630	A6	19920505	BE 911161	A	19911219	199224 B
GB 2262639	A	19930623	GB 9124545	A	19911119	199325 N
GB 2262639	B	19941207	GB 9124545	A	19911119	199501 N

Priority Applications (No Type Date): BE 911161 A 19911219; GB 9124545 A 19911119

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
BE 1003630	A6		20	G06F	
GB 2262639	A		24	G06F-015/20	
GB 2262639	B		4	G06F-015/20	

Abstract (Basic): BE 1003630 A

The system records data and produces documents whilst assuring data preservation. It has a **control** unit with operator interface, a non-remanent **memory**, a text **processor**, a **permanent memory** input circuit, containing a relational data base with predetermined data for the production of documents and a primary data base having a fixed storage **capacity** of at least 2 kilobytes.

The system includes the various stages for data input error checking, recording and transmission of data, production of printing instructions, display at operator input of incorrect data with facility for correction.

ADVANTAGE - Reduces **time** spent on **recording** data for document production whilst ensuring correct data input and data preservation.

Dwg.1/2

Title Terms: DATA; STORAGE; MEMORY; DOCUMENT; PRODUCE; EXTEND; OPERATE; INPUT; ERROR; CHECK; DATA; VERIFICATION; DISPLAY; INPUT; DATA

Derwent Class: T01

International Patent Class (Main): G06F-013/00; G06F-015/20

File Segment: EPI

10/5/3        (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008308184    \*\*Image available\*\*

WPI Acc No: 1990-195185/199026

XRPX Acc No: N90-151868

**Fault diagnosis in vehicle electrical and electronic circuits - uses processor operating under specific program to control recording of signal data in permanent memory for later display**

Patent Assignee: ACTIA SA (ACTI-N)

Inventor: BETHENCOURT G; FONTE J; BETHENCOUR G; FONTE J C

Number of Countries: 013    Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 374998	A	19900627	EP 89203045	A	19891130	199026 B
FR 2641085	A	19900629				199033
US 5107428	A	19920421	US 89456091	A	19891222	199219
EP 374998	B1	19930825	EP 89203045	A	19891130	199334
DE 68908682	E	19930930	DE 608682	A	19891130	199340
			EP 89203045	A	19891130	
ES 2045395	T3	19940116	EP 89203045	A	19891130	199407

Priority Applications (No Type Date): FR 8817368 A 1988122  
Cited Patents: EP 141050; EP 225971; EP 231607; EP 231743; EP 39122; EP  
5436; GB 2081909; WO 8802122

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 374998	A				
Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE					
US 5107428	A		14		
EP 374998	B1	F.	28	G07C-005/08	
Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE					
DE 68908682	E			G07C-005/08	Based on patent EP 374998
ES 2045395	T3			G07C-005/08	Based on patent EP 374998

Abstract (Basic): EP 374998 A

The diagnosis unit has a connection (2) which allows the monitoring of the states of the signals in the system to be tested. The unit input has a wave shaping interface (15) with multiple calibration modules set up in parallel. A multi-function processor (21) is connected to the wave-shaping interface (15) and has a battery-backed memory in which it stores, in real time, detected fault signals. The processor memory (25) stores multiple diagnostic programmes each corresponding a particular vehicle.

A user interface (28) is provided, having a display which shows the contents of the battery backed memory. Manual selection is provided to determine which program will be used and which data displayed.

ADVANTAGE - Low cost vehicle-mounted diagnostic circuit which keeps records of electrical signals while vehicle is on road, providing data taken under normal operating conditions for more accurate maintenance and to facilitate tracking of intermittent faults. (23pp Dwg.No.3/10)

Title Terms: FAULT; DIAGNOSE; VEHICLE; ELECTRIC; ELECTRONIC; CIRCUIT; PROCESSOR; OPERATE; SPECIFIC; PROGRAM; CONTROL; RECORD; SIGNAL; DATA; PERMANENT; MEMORY; LATE; DISPLAY

Derwent Class: S01; T05; X22

International Patent Class (Main): G07C-005/08

International Patent Class (Additional): G01M-015/00; G01R-031/00

File Segment: EPI

10/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2001 Derwent Info Ltd. All rts. reserv.

007653757

WPI Acc No: 1988-287689/198841

XRPX Acc No: N88-218302

**Real-time accumulator and processor for watt-hour meter - updates  
internal real-time clock with data from back-up battery-powered  
clock immediately after outage termination**

Patent Assignee: SANGAMO WESTON LTD (SAEL ); SCHLUMBERGER IND INC (SLMB )

Inventor: CVOPPOLE R; RIGGS R L; STREET T G; COPPOLA R

Number of Countries: 012 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 286544	A	19881012	EP 88400861	A	19880411	198841 B
BR 8801658	A	19881116				198851
CA 1293995	C	19920107				199209
US 5216357	A	19930601	US 8736633	A	19870410	199323
			US 89358494	A	19890530	
			US 91641385	A	19910114	

Priority Applications (No Type Date): US 8736633 A 19870410; US 89358494 A  
19890530; US 91641385 A 19910114

Cited Patents: A3...8929; GB 2017937; GB 2069153; GB 2136613; No-SR.Pub; US  
4197582; US 4466074

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 286544	A	E	12		

Designated States (Regional): AT BE DE ES FR GB IT LU N  
US 5216357 A 13 G01R-022/00 Cont of application US 8736633  
Cont of application US 89358494

Abstract (Basic): EP 286544 A

A **microprocessor** synchronised by a crystal oscillator includes an internal real-time clock and ROM for **control** program storage. When power outage is detected, energy consumption and associated real-time data are transferred from the internal RAM to an external nonvolatile NMOS or CMOS RAM.

The clock is reset to accumulate real time while an external clock is powered from the back-up battery. If this has less than a predetermined residual **capacity**, real time elapsing during the outage is not accumulated and an alarm is displayed.

USE/ADVANTAGE - Solid-state **time** -of-use electricity meter **register** having back-up battery. Loss of power and time-of-use data during outages is minimised by updating immediately after restoration of power.

Title Terms: REAL-TIME; ACCUMULATOR; PROCESSOR; WATT; HOUR; METER; UPDATE; INTERNAL; REAL-TIME; CLOCK; DATA; BACK; UP; BATTERY; POWER; CLOCK; IMMEDIATE; AFTER; OUTAGE; TERMINATE

Derwent Class: S01

International Patent Class (Main): G01R-022/00

International Patent Class (Additional): G01R-013/32; G01R-021/00;  
G06F-012/16

File Segment: EPI

10/5/5 (Item 5 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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001505778

WPI Acc No: 1976-G8705X/197631

**Digital computer microprogramme control circuit - is simplified to increase operational speed, circuit economy and reliability**

Patent Assignee: OVSEPYAN G E (OVSE-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 482743	A	19751209				197631 B

Priority Applications (No Type Date): SU 1164764 A 19670610

Abstract (Basic): SU 482743 A

Circuit disclosed in Spec. No. 224161 is rearranged to reduce communication lines between registers, thus increasing operational speed and circuit economy. Circuit contains **long-term memory storage** (1), registers (2-4), decoder (5), clock generator (6), OR logic (7-10), AND logic (11), gates (12-17) and invertors (18-17) and invertors (18-21). Control pulses are directed to various units through gates (12). All operational cycle is **controlled** by clock pulse generator (15). Instead of storing real address micro-**processor** store code which allows the following micro-command address formation without the need of register (4) re-set to zero. Apart from dispensing with re-set line, this method also avoids an address parity check. Address code correction is obtained by re-setting the **register** (4) trigger each **time** micro-command contains elementary operations instruction. Micro-command address is thus formed statistically by invertor circuits (18-21) with **maximum** circuit simplification.

Title Terms: DIGITAL; COMPUTER; CONTROL; CIRCUIT; SIMPLIFY; INCREASE; OPERATE; SPEED; CIRCUIT; ECONOMY; RELIABILITY

Derwent Class: T01

International Patent Class (Additional): G06F-009/16

File Segment: EPI

10/5/6 (Item 1 from file: 347)  
DIALOG(R) File 347:JAPIO  
(c) 2001 JPO & JAPIO. All rts. reserv.

05491858 \*\*Image available\*\*  
RECORDING METHOD AND INFORMATION-RECORD REPRODUCER

PUB. NO.: 09-106658 [JP 9106658 A]  
PUBLISHED: April 22, 1997 (19970422)  
INVENTOR(s): TASAKA SHUICHI  
HARADA WATARU  
UMEZAKI KIYOSHI  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company  
or Corporation), JP (Japan)  
APPL. NO.: 07-259783 [JP 95259783]  
FILED: October 06, 1995 (19951006)  
INTL CLASS: [6] G11B-027/00; G11B-011/10; G11B-019/02; G11B-027/10  
JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment)  
JAPIO KEYWORD: R138 (APPLIED ELECTRONICS -- Vertical Magnetic &  
Photomagnetic Recording)

#### ABSTRACT

PROBLEM TO BE SOLVED: To decrease the memory **capacity** required for replacement of recording medium by once storing control information in a memory means and recording the information to the recording medium after the completion of data recording when the data are recorded over a plurality of the recording mediums.

SOLUTION: An input information signal 17 is stored into a vibration resisting first memory 11 as a data buffer and stored in a magneto-optical disk through a signal processing part. The **control** information of the recording data is stored in a second memory 12. When the recording **data** covers a **plurality** of disks, the disk is replaced with the next disk with a changer stocker 2 after the recording on the disk. The recording **data** during the **replacement** are stored in the memory 11. Recording is restarted into the mounted disk. At the **time** point when the data **recording** is completed, the control information is written to each disk from the memory 12. Thus, the **capacity** of the memory storing the **data** required for the **replacement** of the disks can be decreased, and the simplification of the reproducer is achieved.

10/5/7 (Item 2 from file: 347)  
DIALOG(R) File 347:JAPIO  
(c) 2001 JPO & JAPIO. All rts. reserv.

02842753 \*\*Image available\*\*  
SYSTEM FOR MAINTAINING DATA IN DATA BASE

PUB. NO.: 01-140353 [JP 1140353 A]  
PUBLISHED: June 01, 1989 (19890601)  
INVENTOR(s): MINODA MASAYOSHI  
KAWAI YOSHITERU  
KUSUYAMA ITARU  
SAITO TSUTOMU  
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
(Japan)  
HITACHI COMPUT ENG CORP LTD [472484] (A Japanese Company or  
Corporation), JP (Japan)  
APPL. NO.: 62-299334 [JP 87299334]  
FILED: November 27, 1987 (19871127)  
INTL CLASS: [4] G06F-012/00; G06F-007/22  
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.1  
(INFORMATION PROCESSING -- Arithmetic Sequence Units)  
JOURNAL: Section: P, Section No. 926, Vol. 13, No. 391, Pg. 146,  
August 30, 1989 (19890830)

#### ABSTRACT

PURPOSE: To acquire spare data for the recovery of a fault by the minimum number of recording media and to perform management for the generating of data by outputting backup only when the data is updated.

CONSTITUTION: An update flag to show that the data is generated newly or is updated is provided. And only the data on which the flag is attached is outputted to a retention file 8 after updating, and all data names are outputted to a data name managing list at the time of outputting to the retention file 8, and at the time of recovering a data base, only the data whose data name is registered in the data name managing list 9 is recovered. In such a way, it is possible to acquire the spare data for the recovery of the fault by the minimum capacity of recording media, and to perform the management for the data extending over plural generations.



16/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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011159131 \*\*Image available\*\*  
WPI Acc No: 1997-137056/199713  
XRPX Acc No: N97-113154

Remote login method of client to server in computer system - has control processor in server servicing remote clients requests with command interpreters, processors through control and data input-output connections

Patent Assignee: NEC CORP (NIDE )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9016412	A	19970117	JP 95160797	A	19950627	199713 B

Priority Applications (No Type Date): JP 95160797 A 19950627

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 9016412	A		7 G06F-009/46	

Abstract (Basic): JP 9016412 A

The method involves transmission of control signals from remote client system (100) to server system (110) on communication control connections (120). At the server end, the control processor (111) is linked to the remote client through the communication control connections. The server system is equipped with command interpreters (113,114), command processors (115,116) and process management table (112). The control signal for command start request from the remote client system is received and command interpreters are started with data regarding the command interpreters involved stored in process management table. Then, each command interpreter is linked to the remote client system through data input-output connections (130,140).

The command start request signal is received through data input-output connections for starting the command processors. The response data resulting from the command process is sent to the concerned originating remote client system. The process management table regulates the operation of command interpreters. When a number of remote client systems transmit command start request signal at the same time, all the signals are handled by one control processor with its process management table and some command interpreters which are started.

ADVANTAGE - Simplifies system organization by use of only one control connection for remote client. Dispenses with need for virtual device between control processor and command interpreter. Minimizes requirements of memory capacity consequent to reduction of other resources. Frees memory for alternate server applications.

Dwg.1/4

Title Terms: REMOTE; METHOD; CLIENT; SERVE; COMPUTER; SYSTEM; CONTROL; PROCESSOR; SERVE; SERVICE; REMOTE; CLIENT; REQUEST; COMMAND; PROCESSOR; THROUGH; CONTROL; DATA; INPUT; OUTPUT; CONNECT

Derwent Class: T01

International Patent Class (Main): G06F-009/46

International Patent Class (Additional): G06F-013/00

File Segment: EPI

16/5/2 (Item 2 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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010284619 \*\*Image available\*\*  
WPI Acc No: 1995-185878/199524  
XRPX Acc No: N95-145527

System interface fault isolator test set for interfaces found in aircraft

- uses time domain reflectometry test techniques to isolate faults from one end of cable

Patent Assignee: GRUMMAN AEROSPACE CORP (GRUA ); NORTHROP GRUMMAN CORP (NOTH )

Inventor: ROLL-MECAK D T; TEICH S

Number of Countries: 021 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9512820	A1	19950511	WO 94US10337	A	19940916	199524 B
US 5479610	A	19951226	US 93144318	A	19931101	199606
TW 269023	A	19960121	TW 94110053	A	19941101	199615
EP 727048	A1	19960821	EP 94930428	A	19940916	199638
			WO 94US10337	A	19940916	
IL 111410	A	19960804	IL 111410	A	19941026	199646
JP 9506448	W	19970624	WO 94US10337	A	19940916	199735
			JP 95513200	A	19940916	
EP 727048	A4	19970423	EP 94930428	A	19940000	199735

Priority Applications (No Type Date): US 93144318 A 19931101

Cited Patents: US 4541031; US 4629835; US 4739276; US 4766386; US 4786857; US 4838690; US 4970466; US 5083080; US 5185579; US 5352984; EP 148674; US 4538103; US 5083086

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9512820	A1	E	20		
					Designated States (National): CA JP
					Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
US 5479610	A		10		
EP 727048	A1	E	20		Based on patent WO 9512820
					Designated States (Regional): DE FR GB
JP 9506448	W		26		Based on patent WO 9512820

Abstract (Basic): WO 9512820 A

A system interface fault isolator has a separate maintenance control unit (2), including a **mass storage** device (16) for storing TDR or VSWR signatures of a variety of systems board connected to a cable or component to the tested.

VSWR data is obtained by processing the TDR data using software built into the maintenance control unit (2). The control unit is programmable to accommodate a variety of different system interfaces and bit status data can be downloaded directly to the control unit. Two adaptors (6) are also provided, one of which is connected to the control unit to analyse a multi-line digital bus, and the other one allows differential TDR measurements to be taken by the SI-FI on a MIL-STD-1553 bus.

USE/ADVANTAGE - Isolation of failures in complex system interfaces such as those found in aircraft. Provides a system interface fault isolation test set which is capable of in-situ fault isolation to a defective component in a system interface path without necessitating the removal of components.

Dwg.2/6

Title Terms: SYSTEM; INTERFACE; FAULT; ISOLATE; TEST; SET; INTERFACE; FOUND ; AIRCRAFT; TIME; DOMAIN; REFLECTOMETER; TEST; TECHNIQUE; ISOLATE; FAULT; ONE; END; CABLE

Derwent Class: S01; T01; W06

International Patent Class (Main): G01R-031/28; G06F-011/00; G06F-013/00

International Patent Class (Additional): G01R-027/28; G06F-003/00;

G06F-011/22; H04L-012/40

File Segment: EPI

16/5/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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007734805 \*\*Image available\*\*

WPI Acc No: 1988-368737/78851

**Communication protocol for public service trunking system translating message protocol and format between site controller and land link and between land link and dispatch console**

Patent Assignee: GENERAL ELECTRIC CO (GENE ); ERICSSON GE MOBILE COMMUNICATIONS (TELF ); GENERAL ELECTRIC CO LTD (ENGE ); ERICSSON GE MOBILE COMMUNICATIONS INC (TELF ); ERICSSON-GE MOBILE COMMUNICATIONS INC (TELF ); ERICSSON INC (TELF )

Inventor: CHILDRESS J S; HUGHES H H; GORDON R T; HATTEY D L; NAZARENKO D M; YURMAN B; COOPER G M; DISSOSWAY M A; HALL N; SPANGLER F

Number of Countries: 006 Number of Patents: 060

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 8809969	A	19881215	WO 88US1983	A	19880603	198851	B
GB 2206018	A	19881221	GB 8813168	A	19880603	198851	
GB 2206019	A	19881221	GB 8813016	A	19880603	198851	
GB 2206020	A	19881221	GB 8813167	A	19880603	198851	
JP 1004126	A	19890109	JP 88134560	A	19880602	198907	
JP 1004133	A	19890109				198907	
JP 64002435	A	19890106	JP 88135797	A	19880603	198907	
US 4821292	A	19890411	US 8756924	A	19870603	198917	
DK 8803054	A	19890315				198922	
US 4835731	A	19890530	US 8785572	A	19870814	198926	
DK 8803052	A	19890317				198928	
DK 8803053	A	19890317				198928	
DK 8900507	A	19890403				198929	
GB 2215946	A	19890927	GB 892033	A	19890131	198939	
US 4903262	A	19900220	US 8785490	A	19870814	199014	
US 4903321	A	19900220	US 8785663	A	19870814	199014	
US 4905234	A	19900227	US 8756923	A	19870603	199015	
US 4905302	A	19900227	US 8756922	A	19870603	199015	
JP 2500713	W	19900308	JP 88505629	A	19880603	199016	
US 4926496	A	19900515	US 8785491	A	19870814	199024	
CA 1282117	C	19910326				199117	
CA 1283455	C	19910423				199121	
US 5020132	A	19910528	US 89365810	A	19890306	199124	
GB 2206020	B	19910710				199128	
GB 2243273	A	19911023	GB 9110433	A	19910514	199143	
CA 1290401	C	19911008				199148	
GB 2244889	A	19911211	GB 9111268	A	19910524	199150	
GB 2244890	A	19911211	GB 9111269	A	19910524	199150	
CA 1292779	C	19911203				199204	N
GB 2215946	B	19920122				199204	
GB 2243273	B	19920122				199204	
US 5086506	A	19920204	US 89442319	A	19891128	199208	
GB 2247380	A	19920226	GB 9110869	A	19910520	199209	
CA 1295370	C	19920204				199212	
US 5109543	A	19920428	US 89449790	A	19891213	199220	
GB 2206018	B	19920603	GB 8813168	A	19880603	199223	
GB 2206019	B	19920603	GB 8813169	A	19880603	199223	
GB 2244889	B	19920603	GB 8813168	A	19880603	199223	
			GB 9111268	A	19910524		
GB 2244890	B	19920603	GB 8813168	A	19880603	199223	
			GB 9111269	A	19910524		
GB 2247380	B	19920603	GB 8813169	A	19880603	199223	
			GB 9110869	A	19910520		
US 5125102	A	19920623	US 8756922	A	19870603	199228	
			US 90464053	A	19900103		
US 5128930	A	19920707	US 8785572	A	19870814	199230	
			US 89365810	A	19890306		
			US 91666841	A	19910308		
CA 1304132	C	19920623	CA 566663	A	19880512	199231	
CA 1305524	C	19920721	CA 580065	A	19881013	199235	N
US 5175866	A	19921229	US 8757046	A	19870603	199303	
			US 90532164	A	19900605		
US 5206863	A	19930427	US 8785572	A	19870814	199318	
			US 89365810	A	19890306		

US 5212724	A	19930	US 91666862	A	19910308	
			US 8785572	A	19870814	99321
			US 89365810	A	19890306	
			US 91666860	A	19910308	
			US 92915769	A	19920721	
US 5265093	A	19931123	US 8785490	A	19870814	199348
			US 89449790	A	19891213	
			US 92832697	A	19920207	
US 5274837	A	19931228	US 8756922	A	19870603	199401
			US 90464053	A	19900103	
			US 92860159	A	19920330	
US 5274838	A	19931228	US 8757046	A	19870603	199401
			US 90532164	A	19900605	
			US 92913906	A	19920716	
CA 1326510	C	19940125	CA 566664	A	19880512	199409 N
			CA 616065	A	19910509	
CA 1336920	C	19950905	CA 616065	A	19910509	199542 N
			CA 616659	A	19930610	
US 5483670	A	19960109	US 8756922	A	19870603	199608
			US 90464053	A	19900103	
			US 92860159	A	19920330	
			US 93105153	A	19930812	
US 5574788	A	19961112	US 8756922	A	19870603	199651
			US 90464053	A	19900103	
			US 92860159	A	19920330	
			US 93105153	A	19930812	
			US 95425152	A	19950419	
KR 9600153	B1	19960103	KR 88831	A	19880130	199905
US 5864762	A	19990126	US 8756922	A	19870603	199911
			US 90464053	A	19900103	
			US 92860159	A	19920330	
			US 93105153	A	19930812	
			US 95425152	A	19950419	
			US 96697330	A	19960822	
KR 9604810	B1	19960413	KR 88830	A	19880130	199914
KR 9609454	B1	19960719	KR 88832	A	19880130	199921
KR 9611123	B1	19960820	KR 882186	A	19880303	199924
JP 3019308	B2	20000313	JP 88128571	A	19880527	200017

Priority Applications (No Type Date): US 8785663 A 19870814; US 8756922 A 19870603; US 8756923 A 19870603; US 8756924 A 19870603; US 8757046 A 19870603; US 8785490 A 19870814; US 8785491 A 19870814; US 8785572 A 19870814; US 89365810 A 19890306; US 89442319 A 19891128; US 89449790 A 19891213; US 90464053 A 19900103; US 91666841 A 19910308; CA 580065 A 19881013; US 90532164 A 19900605; US 91666862 A 19910308; US 91666860 A 19910308; US 92915769 A 19920721; US 92832697 A 19920207; US 92860159 A 19920330; US 92913906 A 19920716; CA 616065 A 19910509; CA 616659 A 19930610; US 93105153 A 19930812; US 95425152 A 19950419; US 96697330 A 19960822

Cited Patents: US 4422171; US 4511958; US 4549297; US 4672601; US 4672655; US 4672658; US 4677656; US 4694473; US 4712214; US 4712229; US 4730348

#### Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 8809969	A	E	224		
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Designated States (National): DK GB JP KR

JP 3019308	B2	53	H04L-001/16	Previous Publ. patent JP 64002435
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US 4821292	A	14		
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US 4835731	A	118		
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US 4903262	A	27		
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US 4903321	A	63		
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US 4905234	A	52		
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US 4926496	A	15		
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US 5086506	A	63		
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US 5109543	A	24		
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GB 2244889	B		H04Q-007/02	Derived from application GB 8813168
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GB 2244890	B		H04Q-007/02	Derived from application GB 8813168
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GB 2247380	B		H04B-007/14	Derived from application GB 8813169
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US 5125102	A	37		Div ex application US 8756922
US 5128930	A	60	H04B-003/26	Div ex application US 8785572
				Div ex application US 89365810
				Div ex patent US 4835731
				Div ex patent US 5020132
US 5175866	A	39	H04B-001/74	Cont of application US 8757046
US 5206863	A	56	G06F-011/10	Div ex application US 8785572
				Div ex application US 89365810
				Div ex patent US 4835731
				Div ex patent US 5020132
US 5212724	A	60	H04M-011/00	Div ex application US 8785572
				Div ex application US 89365810
				Cont of application US 91666860
				Div ex patent US 4835731
				Div ex patent US 5020132
US 5265093	A	25	H04B-001/38	Div ex application US 8785490
				Div ex application US 89449790
				Div ex patent US 4903262
				Div ex patent US 5109543
US 5274837	A	34	H04B-007/14	Div ex application US 8756922
				Div ex application US 90464053
				Div ex patent US 4905302
				Div ex patent US 5125102
US 5274838	A	35	H04B-001/60	Cont of application US 8757046
				Cont of application US 90532164
				Cont of patent US 5175866
CA 1326510	C		H04B-007/24	Div ex application CA 566664
CA 1336920	C		H04B-007/15	Div ex application CA 616065
US 5483670	A	35	H04B-007/14	Div ex application US 8756922
				Div ex application US 90464053
				Div ex application US 92860159
				Div ex patent US 4905302
				Div ex patent US 5125102
				Div ex patent US 5274837
US 5574788	A	36	H04L-009/00	Div ex application US 8756922
				Div ex application US 90464053
				Div ex application US 92860159
				Div ex application US 93105153
				Div ex patent US 4905302
				Div ex patent US 5125102
				Div ex patent US 5274837
				Div ex patent US 5483670
US 5864762	A		H04Q-007/28	Div ex application US 8756922
				Div ex application US 90464053
				Div ex application US 92860159
				Div ex application US 93105153
				Div ex application US 95425152
				Div ex patent US 4905302
				Div ex patent US 5125102
				Div ex patent US 5274837
				Div ex patent US 5483670
				Div ex patent US 5574788
GB 2206018	B		H04Q-007/02	
GB 2206019	B		H04B-007/14	
CA 1304132	C		H04B-007/15	
CA 1305524	C		H04B-007/15	
KR 9600153	B1		H04L-001/16	
KR 9604810	B1		H04B-007/24	
KR 9609454	B1		H04B-007/00	
KR 9611123	B1		H04B-007/14	

Abstract (Basic): WO 8809969 A

The signal communication method comprises sending signals in a predetermined protocol between the site controller and a down link trunking card module over a serial data link. The digital signals are translated from one protocol to another. The signals in the second protocol are communicated between the down link trunking card module

and a switch module remote from the site, over another serial data link.

The second protocol signals are translated into further protocol signals. These signals are communicated between the switch trunking card module and the processor.

USE - In trunk radio repeater system.

Title Terms: COMMUNICATE; PROTOCOL; PUBLIC; SERVICE; TRUNK; SYSTEM;  
TRANSLATION; MESSAGE; PROTOCOL; FORMAT; SITE; CONTROL; LAND; LINK; LAND;  
LINK; DISPATCH; CONSOLE

Derwent Class: T01; W01; W02

International Patent Class (Main): G06F-011/10; H04B-001/38; H04B-001/60;  
H04B-001/74; H04B-007/00; H04B-007/14; H04B-007/15; H04B-007/24;  
H04J-003/26; H04L-001/16; H04L-009/00; H04M-011/00; H04Q-007/02;  
H04Q-007/28

International Patent Class (Additional): G08C-025/00; G08C-025/02;  
H01J-007/04; H04B-001/02; H04B-001/40; H04B-003/36; H04B-007/204;  
H04B-007/26; H04B-017/02; H04J-003/22; H04L-011/20; H04L-012/56;  
H04M-003/22; H04Q-007/04; H04Q-009/02

File Segment: EPI

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File 350:Derwent WPIX 1985-2001/UD,UM &UP=200143  
(c) 2001 Derwent Info Ltd  
File 347:JAPIO OCT 1976-2001/Mar(UPDATED 010705)  
(c) 2001 JPO & JAPIO  
File 344:CHINESE PATENTS ABS APR 1985-2001/Jun  
(c) 2001 EUROPEAN PATENT OFFICE  
File 348:European Patents 1978-2001/Jul W04  
(c) 2001 European Patent Office  
File 349:PCT Fulltext 1983-2001/UB=20010719, UT=20010712  
(c) 2001 WIPO/MicroPat

Set	Items	Description
S1	0	AU=(MIDGLEY C? AND WEBB J? AND CHARTIER D? AND GONSALVES C? AND HANSEN T?)
S2	0	AU=MIDGLEY C? AND AU=(WEBB J? OR CHARTIER D? OR GONSALVES - C? OR HANSEN T?)
S3	638	AU=(MIDGLEY C? OR WEBB J? OR CHARTIER D? OR GONSALVES C? OR HANSEN T?)
S4	0	(BACKUP OR BACK?())UP OR REDUNDAN? OR DUAL?) (5N) SERVER? AND S3
S5	0	S3 AND LONG()TERM(3N) (MEMOR? OR STORAGE)

File 348:European Patents 1978-2001/Jul W04  
 (c) 2001 European Patent Office  
 File 349:PCT Fulltext 1983-2001/UB=20010719, UT=20010712  
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Set	Items	Description
S1	18034	(LONG()TERM OR PERMANENT OR ARCHIV? OR MASS) (5N) (STORAGE? - OR MEMORY OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY? (2W) (DISK? ? OR DISC? ?)
S2	32522	(SERVER? OR DATA OR FILE OR FILES) (5N) (BACKUP? OR BACK???(-)UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR SECONDARY)
S3	70670	(COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR CONTROLLED OR MANAG? OR INTEGRAT?) (5N) (PROCESSOR? OR CPU OR - CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI) (3N) - (DATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))
S4	151417	(COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST??? OR INDICAT? OR REGISTER? OR MARK??? OR EXAMIN?) (5N) (TIME? OR HOUR?? OR MINUTE? ? OR INTERVAL?)
S5	886201	CAPACIT? OR LIMIT? OR MAXIMUM?
S6	897	(TAPE? OR CARTRIDGE?) (5N) (COLLECTION? OR LIBRAR? OR CAROUSEL? OR AUTOMATION()SYSTEM?)
S7	74320	ROBOT? OR CYBERNET? OR AUTOMATE?
S8	0	S1(S)S2(S)S3(S)S4(S)S5(S)S6(S)S7
S9	7	S1(S)S2(S)S3(S)S4(S)S5
S10	5	S9 NOT PATTERNS()ENVIRONMENT/TI
S11	9	S1(S)S2(S)S3(S)S4
S12	2	S11 NOT S9
S13	19	(S1 OR S2) (S)S3(S)S4(S) (S6 OR LIBRAR???)
S14	13	S13 NOT (S9 OR S11)
S15	8	S14 NOT (SERVICE?()PATTERN? OR NETCENTRIC)/TI
S16	0	((S1 OR S2 OR DATA()STORAGE) AND S3 AND S4 .AND (S5 OR S6 OR S7))/TI,AB

?



10/3,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:European Patents  
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00722429

**DATA STORAGE MANAGEMENT FOR NETWORK INTERCONNECTED PROCESSORS**  
**DATENSPEICHERVERWALTUNG FÜR IN EINEM NETZWERK ZUSAMMENGESCHALTETE**  
**PROZESSOREN**

**GESTION DE MEMORISATION DE DONNEES POUR PROCESSEURS INTERCONNECTES EN**  
**RESEAU**

**PATENT ASSIGNEE:**

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PATENT (CC, No, Kind, Date): EP 746819 A1 961211 (Basic)

EP 746819 B1 991215

WO 9523376 950831

APPLICATION (CC, No, Date): EP 95911653 950210; WO 95US1660 950210

PRIORITY (CC, No, Date): US 201658 940225

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06F-012/08; G06F-003/06

**NOTE:**

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9950	4348
CLAIMS B	(German)	9950	3803
CLAIMS B	(French)	9950	5378
SPEC B	(English)	9950	10199

Total word count - document A 0

Total word count - document B 23728

Total word count - documents A + B 23728

...SPECIFICATION storage server processor 51 serves to interface the local area network 1 with the backend data storage devices 61-65 (Figure 4) that constitute the **secondary** storage 52. The backend **data** storage devices 61-65, in combination with the file servers 41-43 comprise a hierarchical data storage system. The backend data storage devices 61-65 ...

...is less costly than the dedicated data storage devices 31-33 of the file servers 41-43 to provide a more cost-effective data storage **capacity** for the **processors** 21, 22. The data storage **management** system implements a virtual data storage space for the processors 21, 22 that are connected to the local area network 1. The virtual data storage...

...is connected to the network 1 and used by processors 21, 22. A second section B of the virtual memory comprises the secondary storage 52 **managed** by the storage **server processor** 51. The **secondary** storage 52 provides additional **data** storage **capacity** for each of the primary data storage devices 31-33, represented on Figure 1 as the virtual devices 31S-33S attached in phantom to the primary data storage devices 31-33 of the file servers 41-43. Processor 21 is thereby presented with the image of a greater **capacity** data storage device 31 than is connected to the file server 41. The storage server 51 interfaces to software components stored in each processor 21...

...to the network 1. Data files that are of lower priority are migrated via the network 1 and the storage server processor 51 to backend **data** storage media of the **secondary** storage 52. The **data file** directory resident in the file server 41 that originally contained this data file is updated with a placeholder entry in the directory to indicate that...

...processor 21, 22 and 42 that interfaces to a user, the storage server 50 may provide the user with a notification where necessary that a **time** delay may be **noted** in accessing the requested data file. The storage server processor 51 automatically retrieves the requested data file and transmits it to the data storage device 31 from whence it originally came. The storage **server** processor 51, **secondary** storage 52 and processor resident software modules create a virtual storage **capacity** for each of the file servers 41-43 in a manner that is transparent to both the processor 21, 22 and the user. Each virtual...

...in this system can be expanded in extent in a seamless manner to match the needs of the processors 21, 22 by using low cost **mass storage** devices to implement the secondary storage 52.

#### Network Software

Figure 2 illustrates in block diagram form the typical components of the network software, including the...

10/3,K/2 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00802534

#### ANY-TO-ANY COMPONENT COMPUTING SYSTEM

#### SYSTEME INFORMATIQUE A COMPOSANTS TOUTE CATEGORIE

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200135216 A2 20010517 (WO 0135216)

Application: WO 2000US31231 20001113 (PCT/WO US0031231)

Priority Application: US 99164884 19991112

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

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(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Word Count: 291515

10/3,K/3 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
(c) 2001 WIPO/MicroPat. All rts. reserv.

00775308

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR DETERMINING OPERATIONAL MATURITY OF AN OPERATIONS ORGANIZATION

SYSTEME, PROCEDE ET ARTICLE FABRIQUE PERMETTANT DE MESURER LA MATURITE OPERATIONNELLE D'UNE ORGANISATION D'OPERATIONS

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Legal Representative:

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CA 94303, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200108038 A2 20010201 (WO 0108038)

Application: WO 2000US20399 20000726 (PCT/WO US0020399)

Priority Application: US 99361781 19990726

Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE

DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL

TJ TM TR TT TZ UA UG US UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 82123

Fulltext Availability:

Detailed Description

Detailed Description

... are driving information systems management to a fundamentally new paradigm. While business bottom lines are more tightly coupled with information technology than ever before, studies **indicate** that many CEOs and CFOs feel that they are not getting their money's worth from their IT investments. The complexity of this environment demands... implementation costs with estimated business benefits? If yes, by whom (e.g. team, individual, management, etc.)? Does planning consider the following requirements and functions: hardware **capacity** and layout, HVAC and fire suppression, power, structural planning (i.e. n-itate Manniade or natural disaster), and integration with security planning & management? If yes...backups of Mass StorageManagement configuration files or customized scripts Disaster recovery plan Example Storage policies, naming standards and storage hardware configurations and characteristics (e.g. **maximum** usage levelper device) are registered in the storage information database.

BP Number 2.10.3

BP Name Disk space Management for Mass Storage BP Description...

10/3,K/4 (Item 3 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00601493 \*\*Image available\*\*

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR SWITCHED TELEPHONY COMMUNICATION

SYSTEME PROCEDE ET ARTICLE CONCU POUR LES COMMUNICATIONS TELEPHONIQUES PAR RESEAU COMMUTE

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 9847298 A2 19981022

Application: WO 98US7927 19980415 (PCT/WO US9807927)

Priority Application: US 97835789 19970415; US 97834320 19970415

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN

MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK

ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN

TD TG

Publication Language: English

Filing Language: English

Fulltext Word Count: 175758

Fulltext Availability:

Detailed Description

Detailed Description

... Information content will be provided as an inbound service and an outbound service. The information content that is defined through the VAVVT Browser (Le., Profile **Management** ) is defined as the inbound information content and will be limited to:

- Stock Quotes and Financial News
- Headline News.

Subscribers also have the ability to access additional information content through the ARU interface; however, this information is not configurable through the WWW Browser (i.e., Profile **Management** ). This additional 106 information content will be referred to as outbound information content and will consist of o Stock Quotes and Financial News; o Headline...when a MCI switch is isolated). This display is also available for selected LEC end office switches.

H. Filter Definition Window

The SNMS operator can **limited** the scope of his displays to:

type of alarms that should be presented  
severity of alarms that should be presented acknowledged alarms,  
unacknowledged alarms, or...

...reports. They may also be produced on demand, or per a schedule. These reports may be presented in a number of ways, including but not **limited** to electronic mail 908, X-terminal displays 910, and printed reports 912.

XII. VIDEO TELEPHONY OVER POTS

The next logical step from voice over the...

10/3,K/5 (Item 4 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00546286 \*\*Image available\*\*

**DIGITAL DATA PROCESSING METHODS AND APPARATUS FOR FAULT ISOLATION**

**PROCEDES ET DISPOSITIF DE TRAITEMENT DE DONNEES NUMERIQUES POUR L'ISOLATION DE DEFAULTS**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 9746941 A1 19971211

Application: WO 97US9781 19970605 (PCT/WO US9709781)

Priority Application: US 96658563 19960605

Designated States: AU CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Publication Language: English

Filing Language: English

Fulltext Word Count: 115324

Fulltext Availability:

Detailed Description

Detailed Description

... be discarded 7FFFD0 LED Control Read/Write no exact 7FTF F TC8 Slot ID  
-R-e-a-d-U-n-l-y no exact 7PTF-CO Read Ping **Interval** ReadfWrite no exact  
7FFFB8 Set Interrupt/Interrupt Status Read/Write no not impl.

7FFFB0 Clear Interrupt Write only no

7FTFA8 Set Interrupt Maskinterrupt ReadtWrite no...board to assert the  
cpu-pnline backplane signal, thereby notifying other CPU boards that one  
CPU board has passed through the sync point.

Should the **cpu** -online backplane signal deactivate (say by the only on  
line CPU 29 December 1995 93 PCTfUS97/09781 Polo Software Programming  
Guide Stratus company Confidential breaking...is planned that this mode  
be used to support on-line upgrade of board with different processor  
speeds or memory sizes.

#### 12.3.6 LED Control

Type: ReadfWrIte Offset [22:0]: 7FFFD0

Present on all Xbus boards

Cold and warm reset affect this register as documented below

Compatibility: exact This register...on the Xbus to determine if there is  
still a target that intends to respond to the request. Writing a one sets  
the read ping **interval** to 31 bus phases, or 2.667 microseconds. This  
value is provided for diagnostic and simula tion use only. Writing a zero  
sets the interval...29 -26 PCI Slot Number Note: In HSC2, the most  
significant bit of the PCI slot number (bit [29]) is not used due to  
space **limitations** in the Mirage Map RAM. Since a HSC2 only supports 4  
PC] devices this should not be considered an issue.

25-5 Reserved

4 Option...

?

12/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00784185

**A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR STREAM-BASED COMMUNICATION  
IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT**  
**SYSTEME, PROCEDURE ET ARTICLE DE PRODUCTION FOURNISSANT UN SYSTEME DE  
COMMUNICATION EN CONTINU DANS UN ENVIRONNEMENT DE CONFIGURATIONS DE  
SERVICES DE COMMUNICATION**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200117195 A2 20010308 (WO 0117195)

Application: WO 2000US24125 20000831 (PCT/WO US0024125)

Priority Application: US 99386717 19990831

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

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Publication Language: English

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Fulltext Word Count: 149088

Fulltext Availability:

Detailed Description

Detailed Description

... for transmitting data from a server to a client via pages in  
accordance with an embodiment of the present invention; Figure 96 depicts  
the response **time** for a User Interface to display a list of customers  
in a list box; Figure 97 shows a request that returns a large amount of  
...such as a personnel file or a table of the latitudes and longitudes of  
cities.

An object can represent user-defined data types such as **time** , angles,  
and complex numbers, or points on the plane.

With this enormous capability of an object to represent just about any  
logically separable matters, OOP...Thus, new capabilities are created  
without having to start from scratch.

0 Polymorphism and multiple inheritance make it possible for different  
programmers to mix and **match** characteristics of many different classes  
and create specialized objects that can still work with related objects  
in predictable ways.

0 Class hierarchies and containment hierarchies...

...In a complex system, the class hierarchies for related classes can  
become extremely confusing, with many dozens or even hundreds of classes.

o Flow of **control** . A program written with the aid of class libraries is  
still responsible for the flow of control (i.e., it must control the  
interactions among all the objects created from a particular library).  
The programmer has to decide which functions to call at what times for

which kinds of objects.

**Duplication** of effort. Although class libraries allow programmers to use and reuse many small pieces of code, each programmer puts those pieces together in a different...report distribution database specifies where, when, how, and to whom to distribute the produced report. Specific destinations can include: printer(s), user(s), user groups, **archives** ( **permanent storage** ), and/or specific display devices such as workstations and terminals.

Several additional options exist for distributing reports including timed reporting, multiple copy distribution, and report...

12/3,K/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00431955 \*\*Image available\*\*

**SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS PROTECTION**  
**SYSTEMES ET PROCEDES DE GESTION SECURISEE DE TRANSACTIONS ET DE PROTECTION ELECTRONIQUE DES DROITS**

Patent Applicant/Assignee:

ELECTRONIC PUBLISHING RESOURCES INC

Inventor(s):

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SHEAR Victor H

SPAHN Francis J

VAN WIE David M

Patent and Priority Information (Country, Number, Date):

Patent: WO 9627155 A2-A3 19960906

Application: WO 96US2303 19960213 (PCT/WO US9602303)

Priority Application: US 95388107 19950213

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB  
GE HU IS JP KE KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO  
RU SD SE SG SI TM TR TT UA UG UZ VN KE LS MW SD SZ UG AZ BY KG KZ RU TJ  
TM AT BE CH DE FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML  
MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 205184

Fulltext Availability:

Claims

Claim

... may be conditional on a test (e.g., 3208(3)) such as, for example, whether content usage has exceeded a certain amount, whether a certain **time** period has expired, whether a certain calendar date has been reached, etc.

723

...for example, the PERCs 3100, 3125 shown in Figures 75A and 75B. The second control set 3154b may be used by "multiple negotiation" processes to **manage** the negotiation, and may provide two negotiation methods: "Negotiate 1," and "Negotiate2".

Both negotiation processes may be described as required methods ("Negotiate1" and "Negotiate2") 3156...

...the negotiation continues. Method option selections are made using the desired method and method options specified in the PERCs 3100, 3125. In this example, a **control** set for the PERC 3100 shown in Figure 75A may be compared against the PERC 3125 shown in Figure 75B. If there is a "match..."

15/3,K/1 (Item 1 from file: 349)  
DIALOG(R) File 349:PCT Fulltext  
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00777012

**A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A JAVA BASED E-COMMERCE ARCHITECTURE**

**SYSTEME, PROCEDE ET ARTICLE MANUFACTURE DESTINES A UNE ARCHITECTURE DE COMMERCE ELECTRONIQUE BASEE SUR JAVA**

Patent Applicant/Assignee:

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(Residence), NL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200109721 A2 20010208 (WO 0109721)

Application: WO 2000US20561 20000728 (PCT/WO US0020561)

Priority Application: US 99364531 19990730

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DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK

LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK

SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 133442

Fulltext Availability:

Detailed Description

Detailed Description

... ability to create a wide variety of user interface components.

With Java, developers can create robust User Interface (UI) components. Custom "widgets" (e.g., real-time stock tickers, animated icons, ...be set to include individual user accounts, groups/roles, or no security.

Application Server - Two file types are migrated within application servers, COM Dynamic Link **Library** 's and Java Classes. Both files are created during the application and architecture build processes. The COM DLL's require registration within NITS by inserting...one stage at any point in time. Consider the example of module1. Module1 starts out in development. When the development team indicates, the Source Code **Librarian** moves module I into system test. As soon as that happens, no changes can be made to module I. Only after module1 is promoted to...a change control record indicating which modules have changed. As needed, the DBA checks modified database source code into source code control. A source Code **Librarian** 2604 verifies/prepares necessary objects for building new applications. Unit test and development is completed. hi some cases, a string test may be required. The...

...and prepares validation or test plan. Database modifications are fetched from source code control and applied to an assembly test environment 2702. The Source Code **Librarian** fetches new application, 153 builds it and copies it into assembly test environment 2704. Validation or test plan is executed pass/fail/deviation. The assembly test environment 2804. The Source Code **Librarian** fetches the new application, builds it and copies it into the system test environment. A validation or test plan is executed pass/fail/deviation. The...



...on the production plan 2902. Database modifications are fetched from source code control 2904 and applied to the production environment 2906. The Source Code **Librarian** fetches the new application, builds it and copies it into the production environment. The controlled change-tracking portion of the present description is signed...UPS may not shut down the server if the power failure is brief.

The Smart UPS 1400 should be configured with an interface to the **server**. The recommended interface is the serial port B (COM2) on most servers. PowerChute Plus 5.0 software from American Power Conversion is the recommended choice...

15/3,K/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00761422

#### **BUSINESS ALLIANCE IDENTIFICATION**

#### **SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION POUR L'IDENTIFICATION D'ALLIANCES COMMERCIALES DANS UN CADRE D'ARCHITECTURE RESEAU**

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Patent and Priority Information (Country, Number, Date):

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Application: WO 2000US14375 20000524 (PCT/WO US0014375)  
Priority Application: US 99320816 19990527

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE

DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI  
SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 143341

Fulltext Availability:

Detailed Description

Detailed Description

... Product Product Details

Name/ Category

System JavaPC Software - provides central administration 1.14 and support for the Java platform on PC-based thin client devices.

**Management** JavaPC is targeted at OEMs designing thin-client devices such as Tools transaction terminals, cash registers, kiosks and ATMs.

Product2 Management Console - Java-based utility...read and extract information from source code, screens, reports, and the database. The most common information extracted from a legacy system, however, is the data: **record** /table structure, indexes, and data element definitions.

In component-based architectures, as systems are often built on top of legacy databases, some extraction tools allow...for that purpose.

# Compiler I Linker I Interpreter

This component is responsible for taking raw code (usually in ASCII format) and creating the necessary object, **library**, byte-code, or executable files that become components of the final system. The actual tools required depend on the development language, but always consist of ...

15/3,K/3 (Item 3 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00749027 \*\*Image available\*\*

**UNIVERSAL SYNCHRONOUS NETWORK SYSTEM FOR INTERNET PROCESSOR AND WEB OPERATING ENVIRONMENT**

**SYSTEME DE RESEAU SYNCHRONE UNIVERSEL POUR PROCESSEUR INTERNET ET ENVIRONNEMENT DE FONCTIONNEMENT INTERNET**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200062470 A1 20001019 (WO 0062470)

Application: WO 2000US10101 20000414 (PCT/WO US0010101)

Priority Application: US 99129314 19990414; US 99417528 19991013; US 99444007 19991119; US 99170455 19991213; WO 68US42 20000315

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 89135

Fulltext Availability:

Detailed Description

Detailed Description

... control of a universal time event via the Com2000" Clock Transfer technology is marching along between the communicating nodes. This precision and bias forward in **time marking** is used as the basis for a security seed.

This seed will be used to generate a true and unbreakable random number generator during one...and Upstream Frame Structure.

Figure 60 is an illustration of the UniNet Simplified Burst and Cell Structure.

Figure 61 is an illustration of the UniNet **Time** Relationship between various Frame **Markers**.

Figure 62 is an illustration of the UniNet Transmit Frame Gating Signal.

Figure 63 is an ...Key Encryption Control algorithms.

Figure 67L is an illustration of the RIPEMD- 160 Hash Control algorithms.

Figure 68 is an illustration of the UniNet Communication **Processor**

## System Block Diagram.

Figure 69a is an illustration of the UniNet Baseband Converter and Sampler Block Diagram.

Figure 69b is an illustration of the UniNet...wireline and wireless network. The Com2000tm Intelligent (Modem) - Precision Sampling technology enables to the precision sampling of the signal's parameters or combination of the **Time** (Multi-Time Slot sampling), Phase (Mulfi-Channel Phase sampling) and Frequency (Muiti Carrier sampling) signal spaces. The non-synchronized in time, frequency and phase signal plane controls...

15/3,K/4 (Item 4 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00605427 \*\*Image available\*\*

**UNIVERSAL EPISTEMOLOGICAL MACHINE (A.K.A. ANDROID)**

**MACHINE EPISTEMOLOGIQUE UNIVERSELLE (ANDROIDE A.K.A.)**

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Patent and Priority Information (Country, Number, Date):

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Application: WO 98US8527 19980427 (PCT/WO US9808527)

Priority Application: US 97847230 19970501; US 98876378 19980303

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FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US

UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE

CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN

ML MR NE SN TD TG

Publication Language: English

Filing Language: English

Fulltext Word Count: 262157

Fulltext Availability:

Claims

Claim

... can lay claim to the ultimately real universe, and since the reader shall judge how the unified theory of knowledge and the science of androids **compare** to the heart's eternal knowing, the reader is asked to follow his or her own knowledge of the universe and truth of conscience in...of universes, or their plurality.

In the form of phenomenological composition, a causal element can be construed as the embodiment of a bounded or unbounded **plurality** of causal **elements** of causation themselves and of their connectednesses. In such a case, instead of considering single trajectories of' instances of objective forms in transformation (causal elements...

15/3,K/5 (Item 5 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00542109 \*\*Image available\*\*

**APPARATUS AND METHOD FOR MANAGING AND DISTRIBUTING DESIGN AND MANUFACTURING INFORMATION THROUGHOUT A SHEET METAL PRODUCTION FACILITY**

**APPAREIL ET METHODE CORRESPONDANTE PERMETTANT DE GERER ET DE REPARTIR UNE INFORMATION RELATIVE A LA CONCEPTION ET A LA FABRICATION DANS UNE**

## INSTALLATION DE PRODUCTION DE TOLES

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### Patent and Priority Information (Country, Number, Date):

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Priority Application: US 9616958 19960506; US 96700671 19960731

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Fulltext Word Count: 148636

### Fulltext Availability:

Detailed Description

### Detailed Description

... another) that has a length that is greater than 0 (i.e., the line entity is not a point but a real line). The geometrical **data** in the linked lists may be analyzed to determine the presence of such contact between any two faces in the part.

If a particular face...may be utilized to represent the sheet metal part and the bend model for the part may be implemented through a completely self-contained class **library** . In accordance with an aspect of the present invention, a description will now be provided of any exemplary data structure and access algorithm for the...oriented data model. As shown in Fig. 17, the bend model for the sheet metal part may be defined as a completely self-contained class **library** . All of the required data manipulation and functions for the sheet metal part (e.g., folding, unfolding, etc.) may be captured as member functions of the class **library** . All of the geometrical and topological data may be defined in objects that are grouped within the bend model. The bend model class **library** may be a hierarchy of classes or objects with a part class being the top level class in the hierarchy. The part class may include...

...be performed on or to the part.

Fig. 17 shows an example of the various objects that may be grouped in the bend model class **library** . For example, a part class 50 may be provided that includes various attributes 52. The part attributes 52 may include various part information such as the...part through an object oriented data model, all of the complex mathematical calculations, computational geometry and matrix transformations may be built into a single class **library** . Special bending operations, such as hemming, Z-bending and arc bending, may also be captured inside the class **library** .

Further, manufacturing information, such as the V-width, the bend deduction amount, and the bend sequence, may be also captured within the class **library** . With the bend model, simultaneous dual representation of both the 2-D flat model and 3 D model may be effectuated, as shown in Fig ...display various views of the part based on the information provided in the bend model. The bend model viewer may comprise a set of application **library** modules that are used to visualize the sheet metal part.

Further, the bend model viewer may be designed as a base view class of the ...

...view, a wire frame view, a 2-D flat view and an orthographic view.

- According to an aspect of the invention, the bend model class **library** 80 may include a set of procedures or functions that act upon sheet metal parts depending upon the selected view (e.g., solid, wire, 2...
- ...102; and, depending upon the state of the bend model viewer, the bend model viewer view class may call functions from the bend model class **library** 80. As shown in Fig. 18, the various view model attributes or features 88 that may be selected by a user may include a solid...
- ...viewing modes and functions. Recent advancements and developments in computer based 2-D and 3-D modeling and simulation, such as the availability of graphics **libraries** or packages, may be applied to implement these features of the present invention. In addition, a wide variety of publications and material are available regarding graphics packages, such as OpenGL and RenderWare, may be used to provide graphical computations. Such graphics **libraries** or packages may be Windows based applications and can be used to render the various viewing modes. OpenGL, for example, may be used to render...
- ...example, the station module of the operator. The bend model data may then be reformatted in accordance with the data format utilized by the graphics **library** or package (e.g., OpenGL or RenderWare) that is utilized. Thereafter, the graphics data may be processed in accordance with various programmed routines in order...
- ...or 3-13 representation by the user (e.g., by moving a joystick or a mouse), additional function calls may be made to the graphics **library** to update the rendered image.

To provide the wire frame views of the part, the line entity data of the part may be provided to...of the part may be selected in order to simulate the material specified for the part in the database. For this purpose, a material texture **library** may be provided that comprises a **library** of material textures, such as steel, stainless steel, aluminum, etc. The stored material texture **library** may be accessed and applied by an operator when a solid view is present, so that the surface of the displayed part will more closely...entity or portion of the part is assigned the same screen point as the point of interest. A function call to a graphics package or **library** (such as OpenGL or RenderWare) may be made to determine whether more than one point of the part is assigned to the same screen point...bend sequence.

After the bending sequence has been determined, the operator decides what type of tooling should be used by selecting tools from a stored **library** of tooling data, as shown at step S.236. The pertinent tooling information maybe displayed to the bending operator on the shop floor and display menus may be provided to graphically aid the bending operator in selecting tooling from the **library** . Once a particular tool has been selected from the **library** , the pertinent data relating to the tool may be indicated on the screen. Fig. 31 illustrates an example of the various display menus and data...

- ...1, successive display menus or screen displays are graphically displayed in order to aid the bending operator in picking a particular tool from the tool **library** . The successively displayed screen displays may be displayed simultaneously on the display device (e.g., in overlapping or cascading fashion), or may be individually displayed...
- ...has been selected, the particular data for that tool may be provided in a table and displayed to the operator. The data in the tooling **library** may be predefined and is stored (e.g., in database 30) during an initial set-up procedure of the software. The manual tool selection feature...of a collision to the user.

The tool data that is used to detect for collisions may be actively taken out of a tool shape **library** based on the tooling selection(s) made by the user. Recalculation of a collision at any intermediate bending step

may be performed based on a...

...control various viewing functions (e.g., zoom, pan, rotate, etc.) when viewing the rendered model of the sheet metal part. The joystick device maybe a **multi** -axisjoystick and include select and **control** buttons. Thejoystick maybe implemented through various commercially available joystick devices, including a Microsoft SideWinderjoystick, and may be plugged into a game port of the computer...  
intfentl++ ;  
fentc.gcount[fent-group(intfent)]++ return (fentc) ;  
APPENDIX B This function counts the number of FENTs in a specified set of an intfent matrix.

**Note** : The intfent matrix is symmetric. only half of the matrix are included in the counting.

FENTCOUNT count-specified fents matrix ( int \*pintfentmatrix, int \*Socationlist, int...

15/3,K/6 (Item 6 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00387555

**ENHANCING OPERATIONS OF VIDEO TAPE CASSETTE PLAYERS**

**AMELIORATION DU MODE OPERATOIRE DE MAGNETOSCOPES**

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NG Yee Kong  
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Patent and Priority Information (Country, Number, Date):

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Application: WO 94US14988 19941229 (PCT/WO US9414988)  
Priority Application: US 93176852 19931230

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FI FI GB GE HU KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO  
RU SD SE SI SK TT UA UZ VN KE MW SD SZ AT BE CH DE DK ES FR GB GR IE IT  
LU MC NL PT SE CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 97919

Fulltext Availability:

Detailed Description

Detailed Description

... 9, and a control and audio track head logic circuit 11 of the VCR 1, as well as to the video display 50 and the **microprocessor** controller 31 of the directory controller 30.

The motor and mechanical control logic circuit 5 controls loading and ejecting of the cassette 40 and also...

...15.

I The directory controller 30 includes a microprocessor controller 3 1, a random access memory (RAM) 33 and a directory input/output display and

control panel 32. Preferably the **microprocessor** controller 31 comprises an **integrated** circuit **microprocessor**, a program store 31a, such as a read-only-memory (ROM), for storing a control program to implement methods of the invention, and a clock...

...30 and interfaces with the VCR control logic circuit 21 to implement the necessary functional capabilities for reading, updating and recording the directory. The micro **processor** controller 31 in the indexing VCR 10 performs all indexing functions and human interface, interprets (e.g. tab, indent, screen format, attributes) and processes the...

...31 is illustrated below in conjunction with FIGs. 99-103.

The RAM 33 is a conventional random access semiconductor memory which interfaces directly with the **microprocessor** controller 31. The RAM 33 is preferably non-volatile.

Alternatively, the RAM 33 is battery backed up. The battery back up should maintain the contents...33. Alternately, as discussed below, an on-screen display 50a can be used. The directory information stored in the RAM 33 is processed by the **microprocessor** controller 31.

The VCR 1 additionally comprises a character generator circuit 23 coupled to the, ...tape (e.g., the beginning of the tape). The absolute address preferably has an accuracy of  $\pm 3$  minutes in SLP mode and  $\pm 1$  minute in SP mode. The absolute address is preferably written in 1/4 minute units in SLP mode. As described below, the absolute address is part of the TPA packet that is written on the VBI, typically line 19... bus and become the talker (also referred to as a driver). At any one time, only one talker is allowed on the bus. During this **time**, all other units are listeners. Once the related activities are finished, the talker must give up the bus.

The bus interface circuit 71 comprises a...

...standard TTL load on the bus.

The data on the bus is preferably serial data comprising data cells. Each data cell is defined as the **time** slot between two high to low transitions. The bit length is typically 2.0 milliseconds. Data is preferably encoded in Manchester code. A "zero" is...high transition. Thus, it is a "half" bit. It is not a data bit but a terminator bit. Its width is preferably 2 to 4 **times** the width of the regular bit length.

Referring now to FIG. 21, the initiating unit (VCR system 10) is a listener and monitors the bus...

15/3,K/7 (Item 7 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00384204

**AUDIO AND VIDEO SUBSYSTEMS FOR COMPUTER-BASED CONFERENCING SYSTEM**  
**SOUS-SYSTEMES AUDIO ET VIDEO POUR SYSTEME DE TELECONFERENCE INFORMATISE**

Patent Applicant/Assignee:

INTEL CORPORATION

Inventor(s):

TUNG Peter

GUTMANN Michael

VRVILLO Benjamin

Patent and Priority Information (Country, Number, Date):

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Priority Application: US 93157478 19931124; US 93158246 19931124

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Publication Language: English

Fulltext Word Count: 6875

Fulltext Availability:  
Claims

Claim

... used to de-gated the CPU and other devices from the bus during DMA cycles. When this signal is active (high) the DMA controller has **control** of the bus. The ASIC does not respond to bus cycles when AEN is active.

10CS16# The 1/0 16-bit chip select is used...copy a file from the computer into the notebook and review it with a remote user during a call. When the user is sharing the **notebook** (this **time** is called a "meeting"), the users see the same information on their computers, users can review it together, and make notes directly into the notebook...

15/3,K/8 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00243650

SIGNAL PROCESSING APPARATUS AND METHODS  
DISPOSITIF ET PROCEDES DE TRAITEMENT DE SIGNAUX

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Inventor(s):

HARVEY John C

CUDDIHY James W

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Priority Application: US 8796096 19870911

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KP LK LU MC MG MW NL NO RO SE SN SU TD TG

Publication Language: English

Fulltext Word Count: 168452

Fulltext Availability:  
Claims

Claim

... said bits at particular SPAM-format register memory. Said bits \* are the bits of the meter-monitor format field of said command.

Then, automatically, by **comparing** the information at said SPAM-format memory with preprogrammed format-specification information, SPAM-controller, 205C, determines that said V information at memory matches particular information...unit instructions when said instructions were executed by said load-run-and-code instructions in the course of the processing of said first message). A **match** results (which **indicates** that SPAM-controller, 205C, executed said load-run-and-code instructions under control of said first message.) (At any subscriber station where information at first...receive the next instance of SPAM message information. Automatically, SPAM-controller, 205C, determines that the information at said SPAM-header-@205 register memory does not **match** said cause-retention-of-exec information that is "01"; causes all apparatus of SPAM-controller, 205C, to delete from memory all' information of said transferred...the execution segment of a SPAM command. Receiving the next X bits of said binary information from said valve causes controller, 39, to select and **record** said next X bits (the execution segment of the third combining synch command) at said SPAM-exec register memory, compare the information at said SPAM...instructions to determine whether said possibility exists. Instead, said transfer-a-10-header message instructions include particular preprogrammed 10 header-end-condition information. At those **times** when H+X bits of binary information fill a whole number of signal words



exactly, said information is the binary value of zero.

At all...

...one. In the preferred embodiment where signal words are eight-bit bytes said 10-header-word-length information equals  $(H+X / 8) - 1$ . At those times when  $H+X$  bits of binary information do not fill a whole number of signal words exactly and the quotient of  $H+X$  divided by...untransferred.

Then said evaluate-padding-bits-I instructions cause je controller, 39, to determine that the zero information at A32 said SPAM"Flag-working memory **matches** said continue-? information that is "0". Resulting in a **match** causes controller, 39, to execute said assess-padding-bit instructions. said instructions cause controller, 39, to compare said last byte to said end-?-EOFS-WORD...select and record said H bits (said "11" header) at said SPAM-header register memory then determine that the information at said SPAM-header memory **matches** said 11 header-invoking information that is "11". Said **match** causes controller, 39, to execute particular preprogrammed proc6ts-\* 11-header-message instructions. Said instructions cause controller, 39, to execute controlled functions as if the information...segment, said fourth message has an "11" header and contains no execution segment information. Accordingly, receiving said fourth message does not cause controller, 39, to **record** 12 information at said SPAM-last-01-header-exec memory. When controller, 39, **compares** the information at said SPAM-header register memory to said cause-retention-of-exec information that is "01", no **match** results. The information that was at said memory when said message was received--specifically, the execution segment of the first message--remains at said memory...said fourth message does not cause SPAM-controller, 205C, to record information at said SPAM-last-01-header-ekc memory-@205. When SPAM-controller, 205C, **compares** the information at said SPAM-header-@205 memory to said cause-retention-of-exec-@205 information that is "01", no match results. The information that...

?

File 2:INSPEC 1969-2001/Jul W5  
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File 8:EI Compendex(R) 1970-2001/Jul W5  
(c) 2001 Engineering Info. Inc.  
File 6:NTIS 1964-2001/Aug W3  
Comp&distr 2000 NTIS, Intl Cpyrght All Right  
File 99:Wilson Appl. Sci & Tech Abs 1983-2001/Jun  
(c) 2001 The HW Wilson Co.  
File 144:Pascal 1973-2001/Jul W5  
(c) 2001 INIST/CNRS  
File 77:Conference Papers Index 1973-2001/Jul  
(c) 2001 Cambridge Sci Abs  
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
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File 34:SciSearch(R) Cited Ref Sci 1990-2001/Aug W1  
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(c) 2001 ProQuest Info&Learning  
File 202:Information Science Abs. 1966-2001/ISSUE 04  
(c) Information Today, Inc

Set	Items	Description
S1	42214	(LONG()TERM OR PERMANENT OR ARCHIV? OR MASS) (10N) (STORAGE? OR MEMORY OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY? (2W) (DISK? ? OR DISC? ?)
S2	60223	(SERVER? OR DATA OR FILE OR FILES) (10N) (BACKUP? OR BACK???-()UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR SECONDARY)
S3	61335	(COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR CONTROLLED OR MANAG? OR INTEGRAT?) (5N) (PROCESSOR? OR CPU OR -CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI) (3N)- (DATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))
S4	326453	(COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST??? OR INDICAT? OR REGISTER? OR MARK??? OR EXAMIN?) (5N) (TIME? OR HOUR?? OR MINUTE? ? OR INTERVAL?)
S5	3873511	CAPACIT? OR LIMIT? OR MAXIMUM?
S6	1912	(TAPE? OR CARTRIDGE?) (5N) (COLLECTION? OR LIBRAR? OR CAROUSEL? OR AUTOMATION()SYSTEM?)
S7	599094	ROBOT? OR CYBERNET? OR AUTOMATE?
S8	0	S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7
S9	0	S1 AND S2 AND S3 AND S4 AND S5
S10	361321	S4 OR TIME(2N)SIGNAL????
S11	0	S1 AND S2 AND S3 AND S10
S12	5	(S1 OR S2) AND S3 AND S10 AND (S5 OR S6 OR S7)
S13	4	RD (unique items)
S14	3	S13 NOT FUEL?
S15	9	S1 AND S2 AND S4 AND S5
S16	9	S15 NOT S12
S17	7	RD (unique items)
S18	8680	AU=(MIDGLEY, C? OR MIDGLEY C? OR WEBB, J? OR WEBB J? OR CHARTIER, D? OR CHARTIER D? OR GONSALVES, C? OR GONSALVES C? OR HANSEN, T? OR HANSEN T?)
S19	11	S18 AND (S1 OR S2)
S20	0	S19 AND (S3 OR S4 OR S5 OR S6 OR S7)
S21	7	S19 NOT (PROTEIN? OR QUASAR? OR FUEL OR HOSPITAL?)/TI

14/5/1 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

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5156733 INSPEC Abstract Number: A9604-8770-001, B9602-7510-008,  
C9602-7330-175

**Title: A Holter type system for study of plantar foot pressures**

Author(s): Harris, G.F.; Abu-Faraj, Z.U.; Wertsch, J.J.; Abler, J.H.;  
Vengsarkar, A.S.

Author Affiliation: Dept. of Biomed. Engng., Marquette Univ., Milwaukee,  
WI, USA

Journal: Biomedical Engineering, Applications Basis Communications  
vol.7, no.4 p.409-15

Publisher: Biomed. Eng. Soc. Republic of China,

Publication Date: 25 Aug. 1995 Country of Publication: Taiwan

CODEN: YIGOE0 ISSN: 1016-2356

SICI: 1016-2356(19950825)7:4L:409:HTSS;1-A

Material Identity Number: B351-95005

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: A Holter type, microprocessor based, portable, in-shoe, plantar pressure data acquisition system has been developed. The system offers 16M bytes of data **storage capacity** and allows the **long term** monitoring of plantar pressures during the activities of daily living. The system can collect pressure data from 14 discrete sensor locations at a 20 Hz sampling frequency for 16 **hours** of continuous **recording**. The system employs the Interlink Force Sensing Resistor technology to measure plantar pressures. The unit operates under three different modes: continuous, intermittent, and real time. The system **microprocessor** employs custom software that **controls** data acquisition and sensor calibration, interfaces a dot matrix liquid crystal display module, performs memory checking diagnostics, and monitors battery status. Additional PC software is developed to convert raw voltage data into pressure metrics, determine various gait parameters, conduct statistical analysis, and display analysis results. The system was evaluated during multiple trials with adult male subjects. Results indicated that system performance was sufficiently acceptable for further clinical applications and long term study of daily living activities. (22 Refs)

Subfile: A B C

Descriptors: biomechanics; biomedical electronics; computerised monitoring; data acquisition; medical diagnostic computing; medical signal processing; patient monitoring; portable instruments; pressure sensors

Identifiers: Holter type system; plantar foot pressures; microprocessor based; portable; in-shoe; plantar pressure data acquisition system; long term monitoring; discrete sensor locations; Interlink Force Sensing Resistor technology; continuous; intermittent; real time; custom software; sensor calibration; dot matrix liquid crystal display module; memory checking diagnostics; battery status; PC software; gait parameters; statistical analysis; multiple trials; system performance; clinical applications; daily living activities; 16 MB; 20 Hz

Class Codes: A8770 (Biomedical engineering); A8745 (Biomechanics, biorheology, biological fluid dynamics); B7510 (Biomedical measurement and imaging); B7230 (Sensing devices and transducers); B7210G (Data acquisition systems); B7210B (Automatic test and measurement systems); B7320V (Pressure and vacuum measurement); C7330 (Biology and medical computing); C7410H (Computerised instrumentation); C3240D (Electric transducers and sensing devices); C3385 (Biological and medical control systems); C5520 (Data acquisition equipment and techniques)

Numerical Indexing: memory size 1.7E+07 Byte; frequency 2.0E+01 Hz

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14/5/2 (Item 1 from file: 6)

DIALOG(R) File 6:NTIS

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1853454 NTIS Accession Number: PB95-163895

**Configuration and Performance Evaluation of a Real-Time Robot Control System: A Skeleton Approach**

(Final rept)

Wheatley, T. ; Michaloski, J.

National Inst. of Standards and Technology (NEL), Gaithersburg, MD. Robot Systems Div.

Corp. Source Codes: 092731009

1990 4p

Languages: English Document Type: Journal article

Journal Announcement: GRAI9506

Pub. in Proceedings of Institute of Electrical and Electronics Engineers International Conference on Systems Engineering, Pittsburgh, PA., August 9-11, 1990, p268-271.

NTIS Prices: Not available NTIS

Country of Publication: United States

The use of a skeleton system to model a multi-processor robot control architecture offers the system designer a powerful tool to configure and evaluate system parameters. This paper describes the skeleton approach as applied to the NASREM robot control architecture. The skeleton approach creates the shell of a functioning real-time control system utilizing the actual hardware and operating system code without using actual application code. This is done by replacing the processing part of the application code with time delays. Parameterization of time delays, communication paths, message buffer lengths, and process allocation provides for rapid prototyping of alternative system architectures. Actual system performance is measured to provide realistic data on computation and communication loads. The skeleton reporting facility provides quantitative assessments of system activity. To illustrate the use of this technique, the servo level of the NASREM hierarchy will be modeled using a 5.0 msec cycle time on a multiprocessor system, and compared with the actual system.

Descriptors: Robot control; \*Systems analysis; \*Performance evaluation; Real time; Computer system hardware; Operating systems(Computers); Multiprocessors; Concurrent processing; Hierarchies; Control systems; Reprints

Identifiers: Skeleton systems; NTISCOMNBS

Section Headings: 62GE (Computers, Control, and Information Theory--General); 62B (Computers, Control, and Information Theory--Computer Software)

14/5/3 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

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13335556 PASCAL No.: 98-0061696

**The Movie-2 digital audio/video expansion bus**

LEGAULT A; MATEY J

Matrox Electronic System, Ltd., Dorval, P.Q., H9P 2T4, Canada

SMPTE Technical Conference and World Media Expo, 138 (Los Angeles, Calif. USA) 1996-10-08

Journal: SMPTE journal : (1976), 1997, 106 (10) 718-723

ISSN: 0036-1682 Availability: INIST-3282; 354000069876560060

Document Type: P (Serial); C (Conference Proceedings) ; A (Analytic)

Country of Publication: United States

Language: English

The use of economical, general-purpose personal computers (PCs) in demanding professional video applications like nonlinear editing, graphics creation, animation recording, three-dimensional (3-D) rendering, video-on-demand, and commercial insertion continues to grow. In these applications, specialized PC adapters are typically used to handle the massive processing requirements for transporting natural data types in real time. Commonly used subsystems include video input/output (I/O), video processing (digital video effects (DVE-mixing)), video compression/decompression (codec), audio I/O, audio processing (equalization (EQ)-mixing), mass storage interface, network interface, and video-in-a-window console display. Although it is possible to

accomplish some of the tasks with host central processing unit (CPU) software and a single highly **integrated** adapter, most professional systems require more than one adapter. How to connect these multiple video adapters together inside a PC is a question that system integrators have been wrestling with for many years. This paper examines the **limitations** of commercially available buses in these demanding broadcast video applications, proposes the Movie-2 bus as a high-performance open-architecture standard that overcomes these **limitations**, discusses the Movie-2 bus in detail, and finally, presents a model of a typical nonlinear editing platform as an example of system-level Movie-2 bus implementation.

English Descriptors: Computer architecture; Equalization; Personal computers; Real **time** ; Video **signal** ; Central unit

French Descriptors: Architecture ordinateurur; Egalisation; Ordinateur personnel; Temps reel; Signal video; Unite centrale; Bus transmission

Classification Codes: 001D03J07

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17/5/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2001 Institution of Electrical Engineers. All rts. reserv.

6545473 INSPEC Abstract Number: C2000-05-6120-017

**Title: Redundant optical storage system using DVD-RAM library**

Author(s): Tanabe, T.; Takayanagi, M.; Tatemiti, H.; Ura, T.; Yamamoto, M.

Author Affiliation: NTT Integrated Inf. & Energy Syst. Labs., Tokyo, Japan

Conference Title: 16th IEEE Symposium on Mass Storage Systems in cooperation with the 7th NASA Goddard Conference on Mass Storage Systems and Technologies (Cat. No.99CB37098) p.80-7

Publisher: IEEE, Piscataway, NJ, USA

Publication Date: 1999 Country of Publication: USA vii+276 pp.

ISBN: 0 7695 0204 0 Material Identity Number: XX-2000-00530

U.S. Copyright Clearance Center Code: 1051-9173/99/\$10.00

Conference Title: 16th IEEE Symposium on Mass Storage Systems in cooperation with the 7th NASA Goddard Conference on Mass Storage Systems and Technologies. Information-based Access to Storage: Foundation of Information Systems

Conference Sponsor: IEEE Comput. Soc.; IEEE

Conference Date: 15-18 March 1999 Conference Location: San Diego, CA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: A Digital virtual Disk (DVD) random access memory (RAM) Redundant Array of Inexpensive Libraries (RAIL) optical storage system has been developed and tested at NTT Integrated Information and Energy Systems Laboratories. The RAIL storage system incorporates multiple DVD libraries that consist of dual DVD-RAM drives. Each DVD library utilizes a single mechanical robot picker for media loading and unloading. The current **capacity** of the single sided and single layered DVD optical media used in that system is 2.6 gigabytes. To increase the reliability of stored data and at the same time to eliminate the need for read after Mite verification, a process that can double the **recording time**, a RAID 4 algorithm has been implemented in the control unit of the RAIL storage system. Data sent by the host are transferred to a control unit, that stripes data over five data groups plus one parity unit. The striped and parity data are sent to individual libraries and written to DVD media. This system writes and retrieves storage data with a transfer rate of approximate 6 MB/sec, using write and read control methods that minimize data striping overhead. Other performance factors that affect the transfer rates are the striping size and the number of drives used in the RAIL system. Experimental results indicate that stripe sizes of 32 to 64 KB are sufficient to achieve high throughput. In addition, the transfer rates showed no further increase when the number of drives exceeded eight. This RAIL optical storage system which offers **data redundancy** can be used for networked multimedia applications. (6 Refs)

Subfile: C

Descriptors: optical disc storage; redundancy; virtual storage

Identifiers: redundant optical storage system; DVD-RAM; DVD library; RAIL optical storage system; **data redundancy**; networked multimedia

Class Codes: C6120 (File organisation); C5320K (Optical storage)

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17/5/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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6260921 INSPEC Abstract Number: A1999-13-6110F-007, C1999-07-7320-043

**Title: Computer network system with security for a protein data collection system at the Photon Factory**

Author(s): Sasaki, K.; Watanabe, N.; Sakabe, N.; Sakabe, K.

Author Affiliation: Sch. of Inf. & Sci., Nagoya Univ., Chikusa, Japan

Journal: Journal of Synchrotron Radiation vol.6, pt.2 p.116-18  
Publisher: Munksgaard International Booksellers and Publishers for Int.  
Union Crystallogr,  
Publication Date: 1 March 1999 Country of Publication: Denmark  
CODEN: JSYRES ISSN: 0909-0495  
SICI: 0909-0495(19990301)6:2L:116:CNSW;1-D  
Material Identity Number: D106-1999-003  
Language: English Document Type: Journal Paper (JP)  
Treatment: Experimental (X)

Abstract: In 1997 the prefabricated house of the TARA Sakabe project was constructed very near to the Photon Factory ring, and many computers were installed for crystallographic data handling. A data server with high speed and large **capacity** was required to improve the efficiency of the protein data collection system which integrated a 'high'-security computer network. The new network, based on a 100 Mbps Ethernet, consists of a DEC AlphaServer 4000 with a 115 Gbytes **RAID** disk, DLT as a backup device, CISCO PIX-32 as a firewall between the TARA private network and KEK, and a 100 Mbps switching hub to be linked to imaging-plate readers and workstations. Therefore, the digital output data from the imaging-plate reader are directly recorded on the server disk resulting in higher efficiency of the users' beam **time**. In contrast to **recording** on tape, there is very little problem with **backup** resulting in a high confidence in the **data** -collection system. (7 Refs)

Subfile: A C

Descriptors: computer networks; data acquisition; high energy physics instrumentation computing; nuclear electronics; storage rings; synchrotron radiation; X-ray apparatus; X-ray crystallography

Identifiers: computer network system; protein data collection; crystallographic data handling; collection system efficiency; data server; high-security computer network; DEC AlphaServer; **RAID** disk; backup device; digital output data; imaging-plate readers; data-collection system; CISCO PIX-32 firewall; TARA private network; KEK; switching hub; data acquisition system; protein crystallography

Class Codes: A6110F (Experimental X-ray diffraction and scattering techniques); A6110M (Crystal structure solution and refinement techniques using X-rays); A0785 (X-ray, gamma-ray instruments and techniques); A0650M (Computing devices and techniques); A2920D (Storage rings); C7320 (Physics and chemistry computing); C7410H (Computerised instrumentation); C5520 (Data acquisition equipment and techniques)

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17/5/3 (Item 3 from file: 2)  
DIALOG(R) File 2:INSPEC  
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01159068 INSPEC Abstract Number: C78005818

Title: **A direct access terabit laser archival memory**

Author(s): Heard, H.G.

Author Affiliation: Inst. for Advanced Computation, Ames Res. Center, NASA, Moffett Field, CA, USA

Conference Title: Proceedings on very large data bases p.254-8

Publisher: IEEE, New York, NY, USA

Publication Date: 1977 Country of Publication: USA 570 pp.

Conference Sponsor: ACM; IEEE

Conference Date: 6-8 Oct. 1977 Conference Location: Tokyo, Japan

Language: English Document Type: Conference Paper (PA)

Abstract: This paper addresses recent developments in terabit-level laser **archival memory storage** technology. The laser **memory** employs a 500 milliwatt 514.5 nanometer wavelength argon-ion optical laser source to melt **permanent** bit patterns into a rhodium-coated flexible plastic data **storage** strip. The same laser, operated at an order of magnitude less power output, is used to read the stored binary data. Information densities of  $2.5 \times 10^7$  bits per square inch are achieved as **limited** by tracking and beam spot size. Because each data record is **permanent**, truly **archival storage** (approximately 25 years) is only **limited** by dust build-up. Extensive error correction codes enable performance at the  $10^7$  sup

-10/ bit error rate 1. The system is supported by extensive software that provides call-by-name file access. Operating at peak data rates of 5 megabits/second, the system behaves as an on-line direct-access file, with an on-line **capacity** equivalent to several thousand 1600 BPI 2400-foot rolls of magnetic tape. Worst case access **time** to any **record** is of the order of seconds. Average user-data transfer rates can be as high as 2.86 megabits per second with full **data redundancy**. (6 Refs)

Subfile: C

Descriptors: optical stores

Identifiers: direct access; terabit; laser **archival memory**; flexible plastic data storage strip

Class Codes: C5320K (Optical storage); C6120 (File organisation)

17/5/4 (Item 1 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00630063 01PI05-007

**Back up even your CDs**

Delaney, John R

PC Magazine, May 8, 2001, v20 n9 p47, 1 Page(s)

ISSN: 0888-8507

Company Name: Toshiba

URL: <http://www.sdd.toshiba>

Product Name: Toshiba SD-W2002 DVD-RAM

Languages: English

Document Type: Hardware Review

Grade (of Product Reviewed): C

Geographic Location: United States

Presents a mixed review of Toshiba SD-W2002 DVD-RAM (\$550), DVD-RAM optical disk drive from Toshiba America Electronics Components of Irvine, CA (949). Explains that it offers the ability to store over 4.7GB of data on a single DVD-RAM disk, which is approximately seven **times** the storage **capacity** of CD-Recordable (CD-R) and CD-Rewritable (CD-RW) drives. Highlights DVD-RAM media that can be erased and rewritten up to 100,000 times, CyberLink's PowerDVD software for DVD movie playback, and VOB's Instant Write/Instant Read software. Mentions, however, that both the drive and t are expensive, and it cannot burn audio CDs for standard CD players. Concludes that it is attractive for **backing up huge data files** storing large video and music **files**. On a scale ranging from 1 to 5, it received the rating of 3. Includes a photo and a product summary. (MEM)

Descriptors: Optical Disk Drive; DVD; RAM; Erasable Optical Disk; Backup; Information **Storage**; **Mass Storage**

Identifiers: Toshiba SD-W2002 DVD-RAM; Toshiba

17/5/5 (Item 2 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00303935 93HP02-002

**The optical-enabled office -- New applications abound as optical storage becomes faster, cheaper and more flexible**

Levine, Ron

HP Professional, February 1, 1993, v7 n2 p22-28, 4 Page(s)

ISSN: 0986-145X

Languages: English

Document Type: Buyer and Vendor Guide

Geographic Location: United States

Provides a buyer's guide to optical storage devices. Notes that with optical storage technology, large-scale data collection tasks can be further automated, and such devices are being used on large-**capacity** systems and networks for unattended daily **data backups**. Though access **times** for optical drives are slow **compared** to magnetic media, they provide larger **capacity**, as well as higher media reliability due to the lower possibility of head crashes. Notes applications include CD-ROM



distribution of information and software, WORMs for archiving, and rewritable optical systems for storage. Says that performance is improving. Reports the use of "floptical" disks, along with products of various companies that increase optical drive performance, make optical data accessible to network users; also notes features such as data encryption, 14-inch WORM platters which store up to 10.2 Gb of information, and scalable optical storage. (jo)

Descriptors: Optical Disk; CD-ROM; WORM; Vendor Guide

17/5/6 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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04594137 JICST ACCESSION NUMBER: 00A0327313 FILE SEGMENT: JICST-E

**High-Speed Optical Library System Using Digital Versatile Disk Random Access Memory.**

TANABE T (1); URA T (1); YAMAMOTO M (1)

(1) Ntt Cyber Space Lab., Tokyo, Jpn

Jpn J Appl Phys Part 1, 2000, VOL.39 ,NO.2B, PAGE.920-924, FIG.9, TBL.3, REF.4

JOURNAL NUMBER: G0520BAE ISSN NO: 0021-4922

UNIVERSAL DECIMAL CLASSIFICATION: 681.327 621.3:681.327.1

LANGUAGE: English COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: A high-data-transfer-rate optical storage system using a redundant array of inexpensive libraries (RAIL) has been developed and tested. It incorporates multiple libraries, where each library consists of dual digital versatile disk (DVD) random access memory (RAM) drives and a single robotic hand and holds 2.6 GB DVD disks. To increase the reliability of data storage and at the same time to eliminate the need for read-after-write verification, which doubles the recording time, a redundant array of inexpensive drives (RAID) 4 algorithm is implemented in the control unit of the storage system. Data sent by the host is transferred to a control unit, which stripes the data into five data groups plus one parity unit. The striped and parity data is sent to individual libraries and written to the DVD disks. This system writes and retrieves data with a transfer rate of approximately 6 MB/s, using write and read control methods that minimize the data striping overhead. This reliable library system can be used for networked multimedia applications. (author abst.)

DESCRIPTORS: library(computer); computer programming; file system; digital recording; optical disk; RAM; high speed; file transfer; transmission speed; data storage; disk drive mechanism; memory capacity; multi-media; information network

BROADER DESCRIPTORS: software; file processing; treatment; recording; information medium; memory(computer); equipment; velocity; data transfer; transmission characteristic; characteristic; information storage; storage and accumulation; driving mechanism; mechanism; memory characteristic; capacity; information media; network

CLASSIFICATION CODE(S): JC04060F; NC06020F

17/5/7 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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01518841 JICST ACCESSION NUMBER: 92A0265839 FILE SEGMENT: JICST-E

**Trends in Development of Optical Disk Storage.**

HIRAMATSU TAKUMI (1); YAMADA ICHIRO (2); WATABE AKINORI (2)

(1) Nippon Telegraph & Telephone Corp.; (2) NTT Kyokairyoikiken

NTT R D, 1992, VOL.41,NO.3, PAGE.335-344, FIG.8, REF.15

JOURNAL NUMBER: F0137ACY ISSN NO: 0915-2326

UNIVERSAL DECIMAL CLASSIFICATION: 681.327

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: With the progress of the information society, external storage devices need to become faster and larger **capacity**. Optical disk storage, which offers an extremely high recording density, is expected to be used as a multi-media database file to store large amounts of documents or pictures and also as a high-speed **backup file**. NTT has developed a second-generation optical disk drive, with a **recording** speed about 10 **times** faster than the previous ones, and applied it to an Optical **Mass Storage** System (Optical MSS) with a **maximum capacity** of 1 TB. The development of such high performance systems is expanding the use of optical disk storage systems. Optical disk storage is expected to play a key role, together with picture compression coding technology, in NTT's future multimedia VI&P communication services. (author abst.)

DESCRIPTORS: optical disk; optical memory; technology development; **mass memory**; data writing; information storage; database; computer file; multi-media

BROADER DESCRIPTORS: information medium; memory(computer); equipment; research and development; development; data processing; information processing; treatment; storage and accumulation; information media

CLASSIFICATION CODE(S): JC04060F

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21/5/1 (Item 1 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
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05357768 E.I. No: EIP99094784260

**Title: Disappearing backup window**

Author: **Midgley, Christopher**

Corporate Source: Network Integrity, Inc, Marlborough, MA, USA

Source: Storage Management Solutions v 4 n 4 1999. p 36-39

Publication Year: 1999

CODEN: SMSOFD

Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review)

Journal Announcement: 9910W4

Abstract: Backup has not evolved at the same pace as everything else in the computing environment. A paradigm shift in the business computing model has occurred with the advent of the Internet, global computing, 24 multiplied by 7 operations, high bandwidth applications, data warehousing, and the NT operating environment. All of these changes require that technologies take new approaches to adapt or totally reengineer today's 'batch backup' solutions, which do not address these evolving application environments. New and innovative **backup** and **data** protection architectures will have to address the three major problems, which exist in all traditional solutions, the shrinking backup window, the overhead associated with **backup** processing, and the age of the **data** being restored.

Descriptors: \*Management information systems; Storage allocation (computer); Data storage equipment; Cost effectiveness; Computer architecture; Real time systems; Wide area networks; Open systems

Identifiers: **Data** protection architectures; Innovations; Open-file **backup** windows

Classification Codes:

723.2 (Data Processing); 722.1 (Data Storage, Equipment & Techniques);  
911.2 (Industrial Economics); 722.4 (Digital Computers & Systems)  
723 (Computer Software); 722 (Computer Hardware); 911 (Industrial Economics)  
72 (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT)

21/5/2 (Item 2 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
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01332554 E.I. Monthly No: EI8303019889 E.I. Yearly No: EI83059708

**Title: HISTORICAL TRENDS IN PRECIPITATION CHEMISTRY IN EASTERN NORTH AMERICA - 2.**

Author: **Chartier, D. R.**

Corporate Source: Ont Hydro, Toronto, Can

Source: Research Review - Ontario Hydro n 2 May 1981 p 43-48

Publication Year: 1981

CODEN: RROHDS

Language: ENGLISH

Journal Announcement: 8303

Abstract: As an **alternative data** analysis to that presented in Part 1 of " Historical Trends in Precipitation Chemistry in Eastern North America " , acidity data for the eastern U. S. were divided into various sub-regions which were analyzed for historical pH trends. The subregional analysis was carried out in order to test the hypothesis forwarded by C. V. Cogbill and G. Likens, that the area of high acidity associated with the northeastern U. S. has intensified and spread to the north, west and south. It was found that in the period from 1955 through 1979, the area effected by the low pH precipitation had expanded into the southeastern U. S.

Descriptors: \*METEOROLOGY--\*Atmospheric Precipitation; CHEMICAL ANALYSIS; AIR POLLUTION--Acid Rain

Classification Codes:

443 (Meteorology); 801 (Chemical Analysis & Physical Chemistry); 451 (Air Pollution)

44 (WATER & WATERWORKS ENGINEERING); 80 (CHEMICAL ENGINEERING); 45  
(POLLUTION & SANITARY ENGINEERING)

21/5/3 (Item 1 from file: 144)  
DIALOG(R) File 144:Pascal  
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14051655 PASCAL No.: 99-0241982

**Managing licensed networked electronic resources in a university library**  
**WEBB J**

Washington State University Libraries, United States

Journal: Information technology and libraries, 1998, 17 (4) 198-206

ISSN: 0730-9295 CODEN: ITLBDC Availability: INIST-13941;

354000073537420030

Document Type: P (Serial) ; A (Analytic)

Country of Publication: United States

Note: 1 p.1/4 ref. et notes

Language: English

The issues faced in delivering licensed networked electronic information resources to users have received much attention in university libraries and in the library literature in recent years. Management of those resources has been addressed on many individual topics as well. In key areas such as licensing, access, consortia, and cataloging, for example, issues have been and continue to be explored in some depth. This article presents a holistic view of the management of licensed networked information resources in a university library and suggests areas for further consideration.

English Descriptors: University library; Information management; Electronic information; Licence; Library management; Collection development;  
Electronic periodical; Subscription; Cooperation; Information access;  
User interface; Occupational role; **Archival storage**

French Descriptors: Bibliotheque universitaire; Gestion information;  
Information electronique; Licence; Gestion bibliotheque; Developpement  
collection; Periodique electronique; Abonnement; Cooperation; Acces  
information; Interface utilisateur; Role professionnel; Archivage;  
Agregateur; Consortium

Classification Codes: 001A01B02B1; 205

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21/5/4 (Item 1 from file: 233)  
DIALOG(R) File 233:Internet & Personal Comp. Abs.  
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00607099 00SU07-001

**Electronic vaulting for Windows NT/2000**

Holland, Chuck; Midgley, Christopher W

Storage Management Solutions , July 1, 2000 , v5 n4 p14-17, 3 Page(s)

ISSN: 1097-5152

Company Name: Microsoft

Product Name: Microsoft Windows NT; Microsoft Windows 2000

Languages: English

Document Type: Articles, News & Columns

Geographic Location: United States

Discusses implementing an electronic vaulting strategy in Windows NT/2000 sites. States that electronic vaulting services can be purchased as a package from service providers or enterprises can build their own electronic vaulting operations. Relates that the emergence of electronic vaulting services delivers to the Windows market an affordable, Internet-based method of uploading changed data and copying or restoring data to the system in case of a disaster. Mentions the different types of service offered by electronic vaulting providers, with options ranging from

no-cost to high-cost. Also discusses a do-it-yourself electronic vaulting strategy, and says that these options allow replication in realtime over an intranet or the Internet, saving the cost of physical tape transport, training of local personnel, and lost productive system time. (KMD)

Descriptors: Information **Storage** ; **Mass Storage** ; Strategy;  
Enterprise Computing; Network Management; Disaster Recovery  
Identifiers: Microsoft Windows NT; Microsoft Windows 2000; Microsoft

21/5/5 (Item 2 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00602868 00SU05-002

**Disaster recovery planning in the new economy -- Waking to the opportunity of electronic vaulting**

Holland, Chuck; **Midgley, Christopher W**

Storage Management Solutions , May 1, 2000 , v5 n3 p28-29, 2 Page(s)

ISSN: 1097-5152

Languages: English

Document Type: Articles, News & Columns

Geographic Location: United States

Focuses on disaster recovery. Says that with 24x7 operations standard, disaster recovery is now an operational imperative that can be supported by new technologies. Adds that new bandwidth offerings combined with Internet-based data centers and revolutionary data replication technologies make protecting data easier and more affordable than ever. States that to appropriately protect their business data in the new economy, Windows NT/2000 professionals must understand the technologies that support recovery planning as well as the steps necessary to implement a sound backup and recovery strategy. Describes the three critical ne technologies that are forever changing the face of disaster rec planning: bigger bandwidth, Internet Data Centers, and byte-level replication technologies. (KMD)

Descriptors: Disaster Recovery; Bandwidth; **Data** Communication;  
**Backup** ; Strategy; Business; Information Storage

21/5/6 (Item 3 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00540518 99SU07-005

**The disappearing backup window**

**Midgley, Christopher**

Storage Management Solutions , July 1, 1999 , v4 n4 p36-39, 4 Page(s)

Languages: English

Document Type: Articles, News & Columns.

Geographic Location: United States

Discusses the need for realtime, online backups. Says that all the changes in technology require that technologists take new approaches to adapt, or totally re-engineer, today's ``batch backup'' solutions that do not address the evolving applications environments. States that new and innovative **backup** and **data** protection architectures will have to address the three major problems that exist in all traditional solutions: the shrinking backup window, the overhead associated with **backup** processing, and the age of the **data** being restored. Notes that an intelligent **data** protection architecture is needed to provide the advanced realtime **backup** solutions that solve these problems. Lists the features to look for in **data** protection architecture. Concludes that powerful tools which provide **backup** services and can adapt to business practices, are the essence of emerging backup solutions for the 21st century enterprise. (KMH)

Descriptors: **Backup** ; Software Tools; Application Development;  
Architecture; **Data** Warehousing; Business; Enterprise Computing

21/5/7 (Item 1 from file: 35)  
DIALOG(R) File 35:Dissertation Abs Online  
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867468 ORDER NO: AAD84-21934

**INCENTIVES THAT ATTRACT PRINCIPALS TO OVERSEAS EDUCATION AND LEAD TO ORGANIZATIONAL COMMITMENT**

Author: **HANSEN, TIMOTHY TODD**

Degree: PH.D.

Year: 1984

Corporate Source/Institution: THE UNIVERSITY OF WISCONSIN - MADISON (0262)

Source: VOLUME 45/10-A OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 3040. 150 PAGES

Descriptors: EDUCATION, ADMINISTRATION

Descriptor Codes: 0514

The purpose of this study was to examine the relationship between incentives that attract principals to overseas education, demographic variables, and organizational commitment. The theoretical framework for this study was based on previous research involving organizations and incentives, organizational commitment, and organizational recruitment.

Three sets of **data** were collected from 63 elementary and **secondary** school principals working in schools affiliated with the Near East/South Asia Council of Overseas Schools. The Overseas Education Incentives Survey was designed and validated in this study to assist in interviewing principals and to identify the degree of influence incentives played in attracting principals to overseas education. Other data included scores from the Organizational Commitment Questionnaire and personal and job-related information from the Demographic Questionnaire. Spearman rank order correlations were used to answer the two major questions in the study. The nonparametric statistical test was used to examine the magnitude of correlations between incentives, demographic variables, and commitment to the organization. Since this was a population study, no level of statistical significance was set.

Findings and Conclusions. (1) Nine of the ten correlations between incentives and organizational commitment were found to be negligible. The most significant relationship was found between the desire to leave education in the United States and the total organizational commitment score (-.37), with an explained variance of 14.0 percent. (2) Little variance in organizational commitment is accounted for by the incentives examined in this study. (3) Nine of the ten correlations between demographic variables and organizational commitment were found to be negligible. The strongest relationship that emerged was years of experience in the present school and organizational commitment with an explained variance of 12.0 percent. (4) Little variance in organizational commitment is accounted for by the demographic variables in this study.

The correlations that emerged in this study illustrate a weak relationship between incentives, demographic variables, and organizational commitment. Based on these conclusions, implications for future research and practice were suggested.

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Set	Items	Description
S1	133073	(LONG()TERM OR PERMANENT OR ARCHIV? OR MASS) (5N) (STORAGE? - OR MEMORY OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY? (2W) (DISK? ? OR DISC? ?)
S2	189967	(SERVER? OR DATA OR FILE OR FILES) (10N) (BACKUP? OR BACK???- ( )UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR SECONDARY)
S3	113612	(COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR CONTROLLED OR MANAG? OR INTEGRAT?) (5N) (PROCESSOR? OR CPU OR - CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI) (3N)- (DATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))
S4	966586	(COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST??? OR INDICAT? OR REGISTER? OR MARK??? OR EXAMIN?) (5N) (TIME? OR HOUR?? OR MINUTE? ? OR INTERVAL?) OR TIME(3N)SIGNAL???
S5	4522438	CAPACIT? OR LIMIT? OR MAXIMUM?
S6	20706	(TAPE? OR CARTRIDGE?) (5N) (COLLECTION? OR LIBRAR? OR CAROUS- EL? OR AUTOMATION()SYSTEM?)
S7	742319	ROBOT? OR CYBERNET? OR AUTOMATE?
S8	0	S1(S)S2(S)S3(S)S4(S)S5(S) (S6 OR S7)
S9	1	(S1 OR S2) (S)S3(S)S4(S)S5(S) (S6 OR S7)
S10	15	S1(S)S2(S)S4(S)S5
S11	9	RD (unique items)
S12	43	S1(S)S2(S) (S3 OR S4) (S) (S5 OR S6 OR S7)
S13	28	S12 NOT S10
S14	28	S13 NOT PY=2000:2001
S15	14	RD (unique items)
?		

11/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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06013154 Supplier Number: 53420581 (USE FORMAT 7 FOR FULLTEXT)  
**LAN giant does storage -- 3Com senses strong appeal in Storage Area Network market. (StorageConnect line) (Company Business and Marketing)**  
Medford, Cassimir  
VARbusiness, p61(1)  
Nov 9, 1998  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 1096

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...gradually gained so much momentum in the press and analyst communities that it has grown into an all-out Jihad. But this holy war over **mass storage** options is being fought almost exclusively on graph paper and among combatants that aren't major players on the industry stage. They don't possess...

...based networking traffic management make up some of the logjam of emerging technologies and architectures with which the market is currently struggling. Is the SAN **market** ready for prime **time** in the channel? "At this stage, it's just another product," says Joel Terry, service technician, CSI Data Systems Inc., Norcross, Ga. "The whole business...

...just now getting accepted in the market. I think SAN will have to wait its turn. Right now, it's just another market play with **limited** possibilities." Partnering For Possibility But 3Com does not expect to do it alone. The company will also seek out partnerships with other vendors in an...

...and MTI Technology Corp. as its nonexclusive partners in its first foray into the market. CLARiiON will assist 3Com in developing, testing and marketing a **RAID** solution that both companies hope will set the standard for networked storage. The solution will include CLARiiON's FC5000 Series full Fibre Channel arrays, Navisphere...

...has been one of the areas of focus for vendors of Fibre Channel and SAN technology-the value proposition being the ability to take network **backup** off the **data** network and put it on the SAN, thus freeing the network from the congestion and restraints imposed by **data backup**. The three companies will work on an interoperable "LAN-Free" Backup solution using SANs. MTI will provide its **RAID** arrays and tape libraries, while Legato will bring backup solutions to the multivendor partnership. Many SAN vendors are lukewarm to 3Com's entry into the...

11/3,K/2 (Item 2 from file: 16)  
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05927710 Supplier Number: 53167680 (USE FORMAT 7 FOR FULLTEXT)  
**Storage: Quantum Announces Industry's First Ultra160/m SCSI Disk Drives for Servers, Workstations, and Storage Subsystems. (Atlas 10K, Atlas IV) (Product Announcement)**  
EDGE: Work-Group Computing Report, pNA  
Nov 2, 1998  
Language: English Record Type: Fulltext  
Article Type: Product Announcement  
Document Type: Newsletter; Trade  
Word Count: 1317

(USE FORMAT 7 FOR FULLTEXT)



TEXT:

...overall drive value is the top consideration." The Quantum Atlas10K and the Quantum Atlas IV also are among the first hard drives to offer 36GB **capacity** in a half-height, 3-1/2-inch form factor, as well as 18GB and 9GB **capacities** in a low-profile, 1-inch-high footprint. Just as significant, both drive families support the advanced data integrity capabilities, blazing bus transfer rate, and...

...of ownership benefit for system OEMs, distributors and resellers, and IT departments alike. They all can invest just once in a drive family with the **capacities** and features businesses need to reliably manage their data assets now and into the next millennium. "The need for more enterprise storage **capacity** continues to expand in multiple directions and dimensions. Given the year 2000 problem and other pressures facing IT departments -- along with the doubling of annual **capacity** -- intelligent data management has become one of the most crucial concerns of IT managers," said John Monroe, Chief Analyst for Rigid Disk Drives at Dataquest...

...products to get the overall data manageability, availability, and fast access they'll need today and tomorrow," he said. "As IT organizations continually add storage **capacity** to the systems they buy next year, they won't have to upgrade their storage systems to handle intensifying I/O and connectivity requirements. The...

...Interface Choices The Quantum Atlas10K drive family specifically targets businesses' most demanding storage applications -- i.e., those requiring exceptional drive performance as well as high **capacities** and unsurpassed drive reliability. The Quantum Atlas 10K drives' 10,000 RPM rotation, 5 ms average seek time, and 315 Mb/sec **maximum** internal transfer rate deliver the lightning-fast data access and sustained data streams critical for data-intensive server, workstation, and storage subsystem applications. They include...

...IV drive family provides outstanding price/performance for a broad spectrum of high-end storage applications that are cost-sensitive, yet still require high drive **capacities**, excellent performance, and uninterrupted data availability. Besides its 7,200 RPM rotation, the Quantum Atlas IV features a 6.9 ms average seek time, 257 Mb/sec **maximum** internal transfer rate, and the same rugged reliability as the Quantum Atlas 10K. With the Atlas-class architecture on a cost-effective platform, the Quantum...incorporates several core features of the Ultra3 SCSI specification. Among them are double-edge clocking, which doubles the Ultra2 SCSI bus transfer rate, and cyclical **redundancy** checking, which delivers exceptional **data** integrity and reliability of transferred **data** -- especially during hot-plugging operations in **RAID** environments - for Quantum Atlas users. Another core feature is domain validation, a data management breakthrough that validates the integrity of end users' entire storage network...

...in part from the fully automated manufacturing capabilities of Quantum partner Matsushita-Kotobuki Electronics, Ltd. (MKE), which have long buttressed Quantum's stance as a **time-to-market** leader in the data storage industry. Manufacturer's suggested retail prices for the new Quantum drives are:

11/3,K/3 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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02579788 Supplier Number: 43425176 (USE FORMAT 7 FOR FULLTEXT)  
**PRE-COMDEX INTROS SHOW 2 1/2-INCH IS SIZE OF CHOICE: Drive makers eye new technologies**  
Electronic Engineering Times, p1  
Nov 2, 1992  
Language: English Record Type: Fulltext

... norm just a few years ago. Today's top spin rate is about 6,300 rpm.

Revvng up rpms

Spinning the platter faster reduces the **maximum** time it takes for data to rotate under the head. At the 7,200-rpm rate, latency is 4.17 ms, compared with 5.56 ms at 5,400 rpm. At 3,600 rpm, latency is 8.45 ms. The 7,200-rpm rate also helps trim average access **time** to 8 ms.

In the **market** for 5 1/4-inch drives - which today are used mainly in high-end servers, redundant arrays of inexpensive disk (**RAID**) subsystems and supercomputers - Seagate has pushed the **capacity** of its Elite line up to 3 Gbytes. The new drives offer dual porting to speed accessing and have 2 Mbytes of cache, so the...

11/3,K/4 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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10487921 SUPPLIER NUMBER: 21168510 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**RAID SUBSYSTEMS. (Technology Information)**

Miles, J.b.

Government Computer News, v17, n31, p53(1)

Sept 21, 1998

ISSN: 0738-4300

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 2996

LINE COUNT: 00387

TEXT:

...solution to the problem and each systems manager knows it by name: a redundant array of independent disks to call his or her own. Basic **RAID** has been around for a decade or more, but it's gone through a dozen or so development cycles in that time, making it difficult even for experts to keep up with the changes. Tough choice One thing is for sure: **RAID** is technology-intensive and usually expensive. Those two factors make it critical to select the right one the first time out-a tough order for systems administrators who lack the time to wade through pages of product literature about competing **RAID** levels, interface options, redundancy requirements and the best software for the arrays they have in mind. Contrary to popular opinion, the principal purpose of a **RAID** is not security but data accessibility. Every **RAID** system is a set of two or more independent disk drives configured by the **RAID** controller to appear to the host computer as one large-**capacity** disk drive. Although the host perceives the system as a single drive, the data is distributed across multiple drives. The arrangement provides fault-tolerant storage...

...bottleneck of typical single-drive systems. The payoff to users is 100 percent data availability, regardless of disk failure, plus very fast data retrieval. Is **RAID** worth it? The average starting price of the systems in this guide is \$25,000 and up, depending on configuration. A compensating factor is **RAID**'s low cost per megabyte of storage, which is usually measured in pennies. Peace for pennies Products such as MTI Technology Corp.'s Gladiator 6300...

...fully configured, but their per-megabyte cost for storage can average less than 30 cents. Not bad, considering the peace of mind that comes with **RAID**. All **RAID** systems with two or more drives are scalable, but some are more scalable than others. It is on high-end, scalable **RAID** systems for large workgroups, departments and enterprises or data centers that this Buyers Guide focuses. Such products hold at least two and as many as...

...form factor, although 18.20 3 1/2-inch and 23G 5 1/2-inch drives are coming on fast. Depending on drive size, a single-tower **RAID** system using 9.IG drives can scale up from 18G to 820 of **capacity**. Rack-mount systems allow installation of more disk drives than towers do. Many systems, such as Artecon Inc.'s LynxArray 5000, Clariion's Series 3000 and Compaq Computer

Corp.'s StorageWorks **RAID** Array 7000, allow linking of tower or rack-mount designs in a single architecture that appears as a single disk to the host server. Such...

...scalable to an even higher order. LSI Logic Inc.'s MetaStor system has 50G to 1.8T of storage capability. Western Scientific Inc.'s Cyclone **RAID** Ultra and Winchester Systems Inc.'s FlashDisk **RAID** arrays can each be scaled up to manage more than 1T of storage. All arrays listed can meet storage requirements of typical workgroups--10G to...

...of controllers. Most prices listed are for the minimum configuration available from each vendor. The bottom line is, what you'll pay for a scalable **RAID** system depends on how you load it. Reason for being The main reason to use a **RAID** system is to improve data availability in case of a massive disk failure. Purely electronic computer elements such as CPUs, device controllers and network interface cards fail infrequently, if ever. However, **mass storage** systems such as disk arrays are electro-mechanical devices with a much higher chance of failure. The types, or levels, of **RAID** are nothing more than descriptions of different methods to make data available even if one or more disks on the array fails. The **RAID** Advisory Board has standardized several **RAID** levels that determine how multiple drives are connected and how they work together to protect your data. Different **RAID** levels support different tasks; no superiority of one level over another is implied. **RAID** 0. At this level, data is split up and striped, distributed evenly, across multiple drives. **RAID** 0 has very fast data read and write rates, and because no data overhead in the form of parity checking is involved, it provides **maximum data** storage capability. On the downside, no **data redundancy** is provided--if even one disk fails, all **data** is lost. **RAID** 1. Known as disk mirroring, true **redundancy**, or avoidance of single points of failure, is provided at this level. A copy of each disk is stored on a separate disk. Data reliability is high because selective multiple drive failures can be overcome. But if corrupt data is written to the original disk, it reappears on others. **RAID** 1 is dependable and suitable for most storage applications. **RAID** 0+1. Known as striped mirrored array, this level combines the redundancy of Level 0 with the speed and high storage **capacity** of Level 1. **RAID** 3. At this level, all data bytes are striped across all drives, with parity blocks stored on a separate, dedicated drive. The parity bits provide...

...error checking and allow reconstruction in case information has been damaged. Because it involves extra data overhead and the use of an extra parity drive, **RAID** 3 is more costly than Level 0+1, but it's very dependable and useful for large file transfers. **RAID** 4. Not as common as **RAID** 3, this level also uses a separate drive to store parity blocks. It offers very high data read rates, but low write rates, making it useful only for applications where many writes aren't required. **RAID** 5. At this level, blocks of data and related parity blocks are striped across multiple drives. The write performance **limitations** of Level 4 are almost eliminated and use of many drives is enabled, making this the most requested of **RAID** levels. **RAID** 5 supports virtually all types of applications, including transaction processing demanding high read-write ratios. **RAID** 6. Also called dual parity, this level of **RAID** stripes data across multiple drives. At least two levels of parity are striped along with the data or stored on separate drives. **RAID** 6 provides the highest possible data reliability and fast read and write rates but is costly to implement. **RAID** 10. Vendorspeak for **RAID** 0+1. **RAID** 53. Ditto for **RAID** Levels 5 plus 3. Implementing **RAID** makes potentially lost data available if a drive fails, but doesn't protect against potentially fatal system failures such as faulty power supplies, overheated components or massive board failures. For protection against these and other problems, some level of redundancy should be built into your **RAID** array, especially if it's serving a mission-critical environment. An MTI Technology white paper suggests the following checklist: \* Power supplies. Most high-end **RAID** arrays offer a standby power supply or some type of load-sharing arrangement under which a backup power supply can meet the system's full power requirements if the first one fails. Many **RAID** arrays

come with an uninterruptible power supply to provide auxiliary power in case the main power is interrupted. \* Redundant cooling systems. Redundant standby fans will prevent the **RAID** array from overheating and shutting down if a fan on a tower or rack-mount unit fails. \* Mirrored cache memory. A **secondary** copy of **data** should be placed in cache memory to protect against failure of a memory component or array controller. \* Redundant memory battery backup. This is an auxiliary...

...Redundant, or dual, controllers. In mission-critical operations, it's desirable to have a standby controller available in case the primary controller fails. In some **RAID** designs, the secondary controller provides load balancing, dividing the workload between secondary and main controllers. \* Redundant host interlaces. As with array controllers, it's wise...

...could be a standby or a load balancing design. \* Redundant disk interfaces. This is more backup insurance in case the bus or electronics between the **RAID** array and any of its disks fails. \* Dual buses. A secondary internal bus can handle information between system controllers, memory and interface boards in case...

...can take over. It can be either a standby or load balancing arrangement. You can avoid the vagaries and expense of field technicians if your **RAID** comes with warm swap or hot swap capabilities. Older **RAID** systems had cold swap components- the entire array had to be shut down and powered off before a drive or other component could be replaced...

...activity involving the failed component, but the power needn't be shut down. Hot swap is the best of all the options. A hot swap **RAID** design lets you remove and change a component while the system is still running. Electrical glitches leading to system hang-ups and data corruption are avoided. Hot spare drives sound the same as hot swaps, but are not. If any drive on a **RAID** system fails, the information it contains must be rebuilt quickly on the replacement drive, usually via the parity systems built into **RAID** Levels 0+1, 3 and 5. The system isn't providing full data protection until this happens, and it can take precious hours for it to be fully implemented. In the wings A **RAID** supporting hot spare or hot standby drives has one or more drives installed and ready to go in case an original drive fails. The data rebuilding begins immediately, reducing the amount of lost **time**. With one exception, all **listed RAID** systems use Fast Wide SCSI-2, Ultra SCSI-3 or Fibre Channel connection technologies. IBM Storage System's 7133 Serial Disk System uses IBM's and coaxial connections used in today's advanced network designs. Fibre Channel offers great flexibility for advanced **RAID** designs because it can be used both by networks and **mass storage** systems such as **RAID**. Nearly half the listed systems use Fibre Channel interfaces, at least as high-speed connections from the arrays to the host servers. The number is up from only a handful less than a year ago, and the upward trend is likely to continue. Add **RAID** buying tips to your resear \* Get the fastest data pathway between **RAID** arrays and host servers with Fibre Channel. \* Buy all the scalability you can afford. \* Seek component redundancy for use with missioncritical applications. \* Make full use of remote monitoring and Simple Network Management Protocol software that comes with your **RAID** subsystem. \* Remember that the smallest **capacity** drive in each subsystem becomes the default size of the entire set. \* Know that **RAID** levels have no hierarchy of value.

11/3,K/5 (Item 2 from file: 148)  
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05465645 SUPPLIER NUMBER: 11412625 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**ODETICS INC. TO UNVEIL AUTOMATED TAPE LIBRARY FOR MAINSTREAM COMPUTER MARKET**  
PR Newswire, 1018P4828  
Oct 18, 1991

LANGUAGE: ENGLISH      RECORD TYPE: FULLTEXT  
WORD COUNT: 389      LINE COUNT: 00033

... product is earning high marks from potential customers that have previewed it. "The ACL5480 features a modular design that allows the user's requirements for **capacity** and performance to determine system configuration," he said. "No other 3480-compatible automated library features the flexibility offered by this product. Early reports confirm that the ACL5480 fills an emerging need for **data backup** and **archival storage** in the midrange computer market. Industry analysts state that this **market** has ten **times** the business potential of mainframe computer center libraries."

While the ACL5480 is the first Odetics automated tape library that is designed for 3480 tapes, the...

11/3,K/6      (Item 3 from file: 148)  
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05399745      SUPPLIER NUMBER: 10875673      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Storage technology: a review of options and their implications for electronic publishing. (also includes list of other storage technologies and a glossary of mass storage terms)**  
Arnold, Stephen E.  
Online, v15, n4, p39(13)  
July, 1991  
CODEN: ONLID      ISSN: 0146-5422      LANGUAGE: ENGLISH      RECORD TYPE:  
FULLTEXT  
WORD COUNT: 10554      LINE COUNT: 00832

... of plastic and aluminum. Data are pressed into the aluminum in a process similar to that used for making records. Diameter is 4.72 inches. **Capacity** is about 650MB. DASD: Direct Access Storage Device, a dedicated storage subsystem. Usually contains a number of storage devices. DAT: Digital Audio Tape; a high...

...than .025 nm allows the medium to be used in cassette tapes, open reel tapes, or disks. A 10 1/2 inch reel has a **capacity** of 1,000 gigabytes. Disk array: Sometimes referred to as a RAID; a cluster of relatively small disk drives to do the work of a...  
...Floptical: A "floptical disk drive" is the product of a floppy disk drive and optical technology. A 3 1/2 inch disk yields a formatted **capacity** of 20.8MB. Form factor. "Computer-speak" for references to the standard external size of drive housings, tape cartridges, etc. jukeboxes: Robotic disk libraries; systems...

...of laser and magnetic technology to write data. The read process uses a laser beam. Drives have seek time of 35 to 100 milliseconds as **compared** with 30 **minutes** for tape and 15 to 65 milliseconds for hard disks. Rotational speed is about 1,800 rpms today compared with 3,600 rpm for hard ...

...Winchester drives. Management software: This phrase refers to a wide range of software tools necessary to make storage devices operate. Functions the software handles include **backup**, **file** reorganization, and system configuration. Multifunction drives: A synonym for magneto-optical drives; drives use rewriteable optical disk cartridges Nearline storage: Disks or cartridges held in...

...Data written and read by coherent light systems (lasers). QIC: Acronym for quarter-inch cartridge; the form factor for the most common magnetic tape format. **RAID : Redundant Arrays of Inexpensive Disks**; the name came from a University of California, Berkeley research effort, R-DAT-Digital Audio Tape used for archiving of high-**capacity** computers with SCSI interfaces; a synonym for rotating head technology or helical scan recording techniques. Rewriteable optical drives: A synonym for

magneto-optical drives. These drives allow **data** to be changed; are typically used as **secondary** storage devices. SCSI: Small Computer Systems Interface; an interface that allows up to eight devices to be linked to a single controller; features a higher...

11/3,K/7 (Item 4 from file: 148)  
DIALOG(R) File 148:Gale Group Trade & Industry DB  
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04559562 SUPPLIER NUMBER: 08448138 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**DataImage, Inc. testing new image-processing product which uses digital audio tape.**  
PR Newswire, 0517NE001  
May 17, 1990  
LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 483 LINE COUNT: 00039

... Glastonbury, Conn. announced that it has tested the first phase of an application for a Sony "Digital Audio Tape" ("DAT Tape") to be used for **mass storage** and distribution in conjunction with image-processing systems. The "DAT Tape" can be used to **back -up** not only optical disks but also ASCII and image **files** from magnetic disks. Using this technology, the image is scanned, digitized, indexed, and stored onto a "DAT Tape", which uses a 1.2 gigabyte tape...

...customer to retrieve any image within 30 seconds of request, on average. Although, this retrieval time is slower than the 3 to 8 second access **time** with an optical disk, it **compares** favorably with an 8-millimeter magnetic tape. The "DAT Tape", which is four millimeters in size, costs less than \$20 per unit and allows a customer to economically store for subsequent retrieval more than 21,000 images per tape. This storage **capacity** equates to eight rolls of microfilm or 100 plates of microfiche and compares with an optical laser disk which has storage **capacity** of 6.5 gigabytes or 100,000 images and costs \$360 each.

Robert L. Brasher, president of DataImage stated that "The 'DAT Tape', which is...

11/3,K/8 (Item 1 from file: 636)  
DIALOG(R) File 636:Gale Group Newsletter DB(TM)  
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03144749 Supplier Number: 46435482 (USE FORMAT 7 FOR FULLTEXT)  
**HEWLETT-PACKARD: New HP tape storage system has 8Gb capacity, speed to 62Mb/min**  
M2 Presswire, pN/A  
June 3, 1996  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 724

(USE FORMAT 7 FOR FULLTEXT)  
TEXT:  
M2 PRESSWIRE-3 June 1996-HEWLETT-PACKARD: New HP tape storage system has 8Gb **capacity**, speed to 62Mb/min (C)1994-96 M2 COMMUNICATIONS LTD  
RDATE:010696 Hewlett-Packard has announced a tape storage solution that combines Travan minicartridge technology and SCSI-2 performance to deliver up to 8GB **capacity** and up to 62MB/**minute recording** speed. The HP Colorado T4000s is designed for workstation-based backup and **archival storage** for power PC users, workgroups and LANs and is expected to sell at a street price of under 300 pounds. Using Travan TR-4 technology, the HP Colorado T4000s expands minicartridge **capacity** to 4GB native and 8GB compressed. With its SCSI-2 interface, the T4000s significantly increases **backup** speed compared to previous minicartridge drives. Its 514 KB/second **data** - transfer rate is approximately four times faster than floppy-interface systems, providing backup speeds up to 31MB/minute native

and up to 62MB/minute with 2:1 **data** compression. Using a typical Pentium system, users can **back up** a 1GB hard drive in about 30 minutes. "With workgroups and hard-disk **capacities** increasing, users are looking for greater backup **capacity**," said Dave Smith, European Product Manager for HP's Colorado Memory Systems Division, part of HP's Information Storage Group. "What may not be so obvious is the need for higher performance to cut the time it takes to **back up** and restore **data**. In the past, high **capacity** and high speed meant high cost. Now, those advantages are within reach of virtually any PC user." The HP Colorado T4000s is an internal drive...

...3.1 and DOS operating systems; SCSI data cable; mounting screws; manuals; and one pre-formatted TR-4 minicartridge. The system carries a two-year **limited** warranty and unlimited technical support. An optional HP Colorado brand SCSI-2 controller board is also available. Network support includes Novell NetWare 2.X and...

...sold through a variety of distribution channels under the Colorado and SureStore brand names as well as to OEM customers. In the UK, Hewlett-Packard **Limited** has 5,000 employees and had a turnover of 1.7 billion pounds in 1995. Winners of the 1995 Queen's award for Export Achievement...

...support. HP has 99,900 employees and had revenue of \$25 billion in its 1994 fiscal year. FACT SHEET HP Colorado T4000s Tape Storage System  
**Capacity** : 4GB native (8GB compressed) with QIC-3095 TR-4 minicartridge  
2.1GB native (4.2GB compressed) with QIC-3095 Wide minicartridge Interface:  
SCSI-2 Compatibility...

...80 Wide (HP Colorado T1000/T1000e) and QIC-80 (Jumbo/Trakker 350/250)  
Performance: Backup speeds up to 62MB/min. MTBF: 150,000 hours Warranty:  
**Limited** two year Price: Expected street price of under 300 pounds  
Availability: 1st June 1996 CONTACT: Karen Widdows, Storage Marketing  
Manager Tel: +44 (0)1344 365409...

11/3,K/9 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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01638779 SUPPLIER NUMBER: 15089541

**Hierarchical storage management extends the file system.**

Hadden, Tom

NetWare Technical Journal, v2, n2, p25(3)

March-April, 1994

ISSN: 1040-4503

LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

ABSTRACT: Hierarchical storage management (HSM) is designed to integrate a network's **backup** and **data** protection systems and expand **file** storage procedures across multiple storage devices, including tape and magneto-optical drives. These systems are becoming more important and complex as networks increase in **capacity** and users adopt more distributed resources. HMS systems organize **data** according to frequency of use, and work in cooperation with **backup** systems toward resource efficiency and **data** safety. Transparency is also an issue, meaning users can access data on a range of devices as if it were resident on the user's primary medium. Ideally, data should be stored, in storage classes, on the device that best **matches** the recovery **time** of that class. HSM systems normally adopt a four-tiered hierarchy that includes on-line, near-line, off-line and **archive** storage levels.

15/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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06073311 Supplier Number: 53553467 (USE FORMAT 7 FOR FULLTEXT)  
**Storage: MicroNet Launches Genesis, A Flexible, Fibre Channel-Ready RAID Storage Solution. (Product Announcement)**  
EDGE: Work-Group Computing Report, pNA  
Jan 11, 1999  
Language: English Record Type: Fulltext  
Article Type: Product Announcement  
Document Type: Newsletter; Trade  
Word Count: 957

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Genesis, a platform independent, Fibre Channel-ready **RAID** solution has been announced by MicroNet Technology, Inc. Genesis is a sophisticated and powerful, yet easy-to-manage **RAID** level 0/1/3/5/0+1 system. Genesis is fully factory pre-configured to meet the specific requirements of each user, with unique features which include redundant **RAID** controllers for added security, a Web-based GUI for easier system management and a wide variety of available configurations to suit every need. Boasting up to one terabyte of high-availability storage, Genesis delivers the most powerful **RAID** solution optimized for the mission critical needs of pre-press, video and enterprise markets. A popular Genesis configuration integrates ATTO Technology's dual FibreBridge, allowing...

...995 to \$161,995 SRP. Based on MicroNet's patented and award-winning DataDock technology, Genesis houses up to 28 hard drive modules ranging in **capacities** from 9 to 36GB each. Genesis is scalable, offering 63GB to one terabyte of storage to meet a wide variety of needs. The system features dual redundant, hot swappable **RAID** controllers with active-active or active-passive auto failover capability, mirrored cache and battery **backup**. These features significantly increase **data** throughput and ensure non-stop operation in the unlikely event of a **RAID** controller failure. At the center of Genesis is the **microprocessor**-based ECU (Enhanced Control Unit), which monitors the unit environment including room temperature, system temperature, voltages, fans and power supplies to ensure that they are within specifically defined parameters...

...it can be replaced, and, if the ECU ever fails, operation will not be interrupted. Designed to provide exceptional resilience and fault tolerance, Genesis' redundant **RAID** controllers support **RAID** levels 0/1/3/5/0+1 to meet any application requirement. Genesis is kept at a safe and operable temperature with up to fourteen...  
...meet the needs of all users, Genesis will also be available as a 7-bay and 14-bay solution. The 7-bay model, with a **capacity** up to 250GB, is ideal for use in small to medium companies and as a **RAID** solution to complement Apple's new servers, which are to be introduced at Macworld. The 7-bay GenesisONE ships with a single Ultra LVD SCSI **RAID** controller, delivering the same functionality as other Genesis models. The 14-bay Genesis, which provides up to 500GB of on-line data can be used within medium to large sized companies whose storage needs are rapidly increasing. It includes dual redundant **RAID** controllers and the same feature set as Genesis. Genesis will begin shipping in volume on January 17, 1999 and will be available from qualified resellers and VARs. The SRP of Genesis with dual **RAID** controllers and up to 28, 18GB drive modules for a **capacity** of over 500GB starts at \$89,995. Genesis, with 28 drive modules and up to one terabyte of storage with two Fibre-Channel host connections will be available for \$161,995. Genesis can also be configured with 14, 18GB drive modules with a **capacity** up to 500GB for \$45,000 and as a 63GB desktop tower configuration with 7, 9GB drive modules for \$15,995. Based in Irvine, Calif...



04805099 Supplier Number: 47070314 (USE FORMAT 7 FOR FULLTEXT)  
**Storage: nStor introduces Ultra/Wide cluster-ready RAID solution; New CR8e subsystem increases I/O performance**  
EDGE: Work-Group Computing Report, pN/A  
Jan 27, 1997  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 975

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

nStor Corp. Inc. Monday introduced its new high-performance, cluster-ready CR8e **RAID** subsystem, the first eight bay subsystem to offer transfer data rates of 40MB/sec over an 8-drive Ultra/Wide SCSI-3 bus. The nStor...

...in reliability, data integrity, availability, manageability, and alert notification, all of which significantly contribute to a lowering of the total cost of ownership of a **RAID** subsystem." "nStors design philosophy has always been based on the premise that the life cycle of data is much longer than that of a server," added Paulhus. "nStors server-independent **RAID** systems are compatible with all popular servers, and are unmatched for ease of use, low life-cycle cost and high availability. And, unlike server-based **RAID** systems, nStor systems are scalable so they can grow with the end users network and storage needs." The CR8e is an eight-bay subsystem, available in either a 19" rackmount or tower-based configuration, and is compatible with the nStor AM **RAID** controller family supporting **RAID** levels 0, 1, 3, 5, 10 and 50, as well as on-line disk **capacity** expansion and configuration control designed to lower the cost of ownership and reduce administrator interaction. Key features include: o high-performance Ultra/Wide SCSI-3 architecture supports data transfer speeds up to 40MB/second; o flexible cluster-ready design providing for storage clustering by a PCI **RAID** controller with failover capability or a multi-host embedded **RAID** controller; o on-the-fly **RAID** disk **capacity** expansion and **RAID** level migration, allowing the LAN administrator to fine tune network performance without the costly effort of bringing down the **server**, and **backing up** and restoring **data**; o support for industry-standard hot swappable Single Connector Attached (SCA) disk drives; o redundant active current-sharing hot swappable power supplies, with an expansion...

...a third power supply, provides a more reliable and smooth transition of current when changing power supplies, reducing "spikes" and "surges"; o redundant variable-speed, **microprocessor controlled**, hot swappable cooling fans, designed to reduce overall sound levels and provide adequate cooling for drives up to 10,000 RPM; o cable-less design...

...Enclosure (SAF-TE) specification, co-developed by nStor (formerly Conner Storage Systems) and Intel Corp. and endorsed by more than 12 other leading server and **RAID** controller manufacturers worldwide. Additional information about the SAF-TE specification can be found on the World Wide Web at <http://www.safte.org>. SAF-TE...

...drives with slide mounting rails, two (2) 150 watt hot swappable power supplies, two (2) hot swappable cooling fans, a dual-bus configuration module, and **RAID** management software. The subsystem supports a variety of operating systems, including Novell NetWare, Windows NT, IBM OS/2 Warp with LAN Server, and SCO UNIX...

...Server. Controller options available for the CR8e include a two or three channel Ultra/Wide SCSI-3 Controller with 4MB RAM, or an embedded subsystem **RAID** Controller. The CR8e subsystem is available for shipment now. Suggested list prices are: o CR8e-340T - 12GB Tower Subsystem (3-4GB disk drives) \$11,400...

...Controller \$2,995 nStor Corp. Inc., a wholly owned subsidiary of nStor Technologies Inc. (OTC:NSTP), is a leading supplier of information storage solutions, including **RAID** subsystems, memory products, storage management hardware and software, and digital media management. The company markets its products through a worldwide network of OEMs, distributors, VARs...

15/3,K/3 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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04572065 Supplier Number: 46720852 (USE FORMAT 7 FOR FULLTEXT)  
**Ultra-SCSI RAID Disk Array Features 9.1 GB, Fast-Wide SCSI, 3.5" drives**  
News Release, pN/A  
Sept 18, 1996  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 518

(USE FORMAT 7 FOR FULLTEXT)  
TEXT:  
Woburn, MA. September 18, 1996.) Winchester Systems Inc. announced a new high **capacity** series of their FlashDisk **RAID** disk array products that feature new 9.1 GB FastWide SCSI disk drives in the convenient, half-height, 3.5" format. The FlashDisk **RAID** array family includes a 45.5 GB desktop array that uses five of the 9.1 GB drives plus 72.8 GB pedestal and rackmount...

...now equipped for Fast-Wide SCSI drives with 68-pin connectors that support the new, doubled, 20 MB per second data transfer rate. The FlashDisk **RAID** array also supports Ultra-SCSI host interfaces, both single-ended and differential, that deliver up to 40 MB per second sustained host data transfer rate...

...GB of storage, up to 7,700 I/O operations per second and up to 40 MB data throughput per array. This unique combination of **capacity**, performance and price represents an unparalleled customer value," claims Mr. Joel Leider, the company's chief executive officer. The 40 MB per second host data...

...makes FlashDisk ideal for throughput oriented applications that transfer large quantities of sequential information such as "page and swap" files for multitasking operating systems, web **servers**, **multi**-media, imaging, **data** warehousing, hierarchical storage **management**, **backup** and other applications with large **file** exchanges. Also, the 7,700 per second I/O rate makes FlashDisk ideal for transaction oriented applications including database, OLTP, MRP and other disk intensive...

...SUN Solaris. FlashDisk SCSI is also available for Intel Pentium and Pentium PRO servers plus SGI, MAC, Pentium and Pentium PRO power workstations. Complete FlashDisk **RAID** systems start at \$19,560 for the desktop unit with a single Ultra-SCSI host port and two 9.1 GB Fast-SCSI disk drives...

15/3,K/4 (Item 4 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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03515988 Supplier Number: 44924750 (USE FORMAT 7 FOR FULLTEXT)  
**MTI OFFERS TWO ADDITIONS FOR ITS UNIVERSAL STORAGE ARCHITECTURE FOR MIGRATION TO VMS AND UNIX**  
Computergram International, n2480, pN/A  
August 16, 1994  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 355

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...heterogeneous computing environments and features a dual port architecture that enables two Fast, Wide Small Computer Systems Interface buses to traverse each StorageWare cabinet, offering **redundant data** paths for greater fault tolerance and performance, says MTI. MTI StorageWare's architecture allows for high availability through redundant dual porting. It also ensures input...

...times as high as 22mS. StingRay NFS connects directly to an Ethernet or Fibre Distributed Data Interface network and supports up to 27Gb in a **RAID** 4 array, using a single large Write Anywhere File Layout file system that can write to the first available open disk block in the cylinder, eliminating the disk seek latency common to some **RAID** implementations, says MTI. Entry-level systems with 64Mb cache, seven 2.1Gb disk drives and system software begin at \$39,000. MTI Oasis, claims MTI, is a full-bodied architecture that addresses the needs of a distributed client-server environment by providing centralised administration of the storage resource, **automated library robotics**, media management, back-up, **archive** and hierarchical **storage**. Says MTI, the MTI Oasis provides an enterprise-wide solution to **data management** by enabling **multiple** servers and clients to access and manage multiple **tape libraries** and optical jukeboxes across multiple heterogeneous, networked systems. MTI Oasis prices start at \$8,500 for Unix workgroup back-up.

15/3,K/5 (Item 5 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

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02334583 Supplier Number: 43060119 (USE FORMAT 7 FOR FULLTEXT)

**IBM & Parallax Partner on Servers**

CommunicationsWeek, p23

June 8, 1992

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 740

... System/6000 server, the recently announced POWERserver 970, the PS/2 Server 295 boasts dual Micro Channel Architecture buses for faster data transfer and greater **capacity**. The PS/2 Server 295 includes 12 expansion slots and can transfer 64-bit blocks of data at 200 megabytes per second. The server ships...

...up to 128 megabytes of system memory and 32 megabytes of error correcting code memory designed to detect and avoid errors that can corrupt users' **data**.

The server's fault-tolerant features include IBM's Orthogonal **Redundant Array** of Inexpensive **Disk** -5 Disk Array/2 software, which manages redundant storage of user data on multiple drives.

IBM has also added to the server the Maximum Availability...

15/3,K/6 (Item 1 from file: 160)

DIALOG(R)File 160:Gale Group PROMT(R)

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01947401

**LONG-TERM LIBRARY AND MASS DATA STORAGE**

News Release March 17, 1988 p. 1

Comparex has announced an optical storage system for large computer systems with /370 architecture. The 6385 model features a large storage **capacity**, up to a **maximum** of 712 gigabytes. The alphanumeric data written onto the optical disk by laser beam, can be stored for at least thirty years. For data centres who currently use magnetic **tape** units for

long - term **library storage**, the new **storage medium** offers a technologically advanced and cost effective **alternative**. The Comparex 6385 optical storage system stores alphanumerical **data** as well as graphics and drawings - coded and uncoded. A high performance **control unit**, incorporating a **microprocessor** (68100) forms the central **control station**. It is supported by a 4 megabyte buffer storage and an internal memory of 40 megabytes. The fast optical disks provide immediate access to ...

15/3,K/7 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2001 The Gale Group. All rts. reserv.

11580199 SUPPLIER NUMBER: 20449151 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Redesigning the customer support process for the electronic economy: insights from Storage Dimensions.**  
El Sawy, Omar A.; Bowles, Gene  
MIS Quarterly, v21, n4, p457(27)  
Dec, 1997  
ISSN: 0276-7783 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 11903 LINE COUNT: 00989

... detailed information about the company and its products can be found at [www.storagedimensions.com](http://www.storagedimensions.com).

Storage Dimensions' products fall into three main categories: high-availability **RAID** disk storage systems, high **capacity** tape **backup** systems, and network **storage management** software for **multi-server** networks. **RAID** (**Redundant Array of Independent Disks**) is a fault-tolerant disk subsystem architecture that provides protection against data loss and system interruption and also provides improved data transfer/access rates for large databases. This protection ranges from simply mirroring **data** on **duplicate** drives to breaking **data** into pieces and "striping" it across an array of three or more disks; if one drive goes down, the controller instantly reconstructs the lost data...

15/3,K/8 (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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10882979 SUPPLIER NUMBER: 54116210 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Bug's Life management: Pixar's massive asset storage solution for animation features. (Pixar Animation Studios' equipment used to produce an animated film)**  
Hamit, Francis  
Advanced Imaging, 14, 2, 24(2)  
Feb, 1999  
ISSN: 1042-0711 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 1287 LINE COUNT: 00100

... Using RAID to hold all of this definitely worked for Pixar. "We lost disks and we lost controllers," said Brandeau. "We didn't lose any **data**."

Further **back-up** was provided with a **robotic** "jukebox" tape system that provided incremental back-ups, day by day, working all night long. The workstations used here were SGI Octanes, running between 175...

...to use the Wavefront/Alias software, a solution that Brandeau and other executives at Pixar still find preferable - even now - to other products on the **market**.

"Rendering **time** is important," he said. "It's a function of how many pixels there are, and that's a function of height and width. A motion ...

15/3,K/9 (Item 3 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
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08124425 SUPPLIER NUMBER: 17389671 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Plastics technology: manufacturing handbook & buyers' guide 1995/96. (Buyers Guide)**  
Plastics Technology, v41, n8, pCOV(941)  
August, 1995  
DOCUMENT TYPE: Buyers Guide ISSN: 0032-1257 LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 174436 LINE COUNT: 15187

... slurries up to 4500 lb/hr. Automatic filler unloading from gaylords prevents material loss and ensures clean, dust-free environment. Liquid components received from bulk-storage tanks or drums. Weight-metered components ensure accurate and consistent ratios. Orbital-arm, conical-screw mixer provides efficient mixing. Slurry is automatically transferred to temperature...thermocouples, RTDs, and thermistors. Melt-bolt and springloaded designs, along with accessories such as lead wire, fittings, and connectors.

HARREL, INC.

Three-mode electronic temperature controls include plug-in, single-channel, **microprocessor** -based models, plus line of multizone units in compact, panel-mounted, 16- and 32-zone modules. **Capacity** can be extended to any number of zones using remotely mounted, 30-channel auxiliary modules that operate under supervision of panel-mounted unit.

For extrusion...

15/3,K/10 (Item 4 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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06746487 SUPPLIER NUMBER: 14611203 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**DG unit ups data recovery. (Data General Corp.'s Series 4000 Tape Array) (PC Week LABS: Beta Sight) (Hardware Review) (PC Week Netweek) (includes related article on test methodology) (Evaluation)**  
Mitchell, Eric  
PC Week, v10, n43, pN1(2)  
Nov 1, 1993  
DOCUMENT TYPE: Evaluation ISSN: 0740-1604 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 1240 LINE COUNT: 00095

ABSTRACT: Data General Corp's \$19,500 Series 4000 Tape Array tape drive system is powerful and advanced, although it does not offer stellar **capacity** and users may not manage it easily. The unit uses a tape-array processor based on RAID Level 5 and an array of 4mm drives. The tape-array **processor manages data backup** itself, instead of the CPU, which makes **backup** faster. Throughput speeds are fast, except with large numbers of small files. The system's **RAID 5** technology ensures fault tolerance for tape failure. Series 4000 is designed well, with good looks and sturdy parts. However, the drive mounts could be more solid. The system has a total possible **capacity** of 12.6Gbytes, which does not compare well to auto loader tape drives. Also, Series 4000 lacks external management capabilities and external SCSI ID switches...

15/3,K/11 (Item 5 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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05389183 SUPPLIER NUMBER: 11492424  
**Texas Microsystems offers fault-tolerant PC: single-processor system offers minicomputerlike disaster recovery. (Product Announcement)**  
Scannell, Ed  
InfoWorld, v13, n46, p36(1)

Nov 18, 1991

DOCUMENT TYPE: Product Announcement  
ENGLISH RECORD TYPE: ABSTRACT

ISSN: 0199-6649

LANGUAGE:

ABSTRACT: Texas Microsystems Inc introduces the Fault Tolerant System Architecture, a single-processor system with many **redundant** components designed to provide a level of **data** integrity customarily found on minicomputers. The machine addresses such problems as inconsistent power and damaged data; it uses an enhanced Basic Input/Output System (BIOS) to **control** interactions between the **processor** and peripherals. A coprocessor on the SCSI-2 controller board, a disk-cache management scheme and **Redundant Array of Inexpensive Disks (RAID)** support are also provided. The system accepts up to 64Mbytes of RAM using 4Mbyte SIMM modules and has a VGA controller that supports 1,024 x 768-pixel resolution with 256 colors. SCSI mirrored hard drives with **capacities** of 120 to 360Mbytes are available. Prices begin at \$6,500.

15/3,K/12 (Item 1 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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03605593 Supplier Number: 47464641 (USE FORMAT 7 FOR FULLTEXT)

**NEW RAID BACKUP SOLUTION FROM STREAMLOGIC**

Telecomworldwire, pN/A

June 16, 1997

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 196

STREAMLOGIC has introduced its new **RAID** for tape backup product, StreamArray. The new fault tolerant backup solution incorporates DLT technology with StreamLogic's **microprocessor controlled** enclosure and tape backup array software from Cheyenne. The StreamArray DLT offers system **backup** and **data** recovery capabilities for Windows NT, IntranetWare, NetWare or Intranet servers. The new solution features a **capacity** of up to 160Gb, with backup speeds up to 32Gb/hr and restore search speeds of up to 40,000 files per second. The StreamArray comes with up to 4 drives per array and increases the number of drives in the array as performance and **capacity** are increased to reduce **backup** time. The StreamArray is capable of **backing up** a single **server**, several **servers** or multiple databases at once and offers multiple levels of fault tolerance with up to four hot pluggable DLT mechanisms. StreamLogic's enclosure also supports...

15/3,K/13 (Item 1 from file: 88)

DIALOG(R)File 88:Gale Group Business A.R.T.S.

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04092779 SUPPLIER NUMBER: 18873226

**Soup up your server. (identifying bottlenecks to enhance performance of AppleShare servers) (Technology Tutorial) (Tutorial)**

Wiseth, Kelli

MacUser, v13, n1, p119(5)

Jan, 1997

DOCUMENT TYPE: Tutorial

ISSN: 0884-0997

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2883 LINE COUNT: 00220

TEXT:

...finding out whether your server is overutilized. You can monitor file and folder operations, such as deleting, opening, and renaming files and folders. Even Server **Manager** doesn't distinguish among **CPU**, **NIC** (network interface card), ...calls and which client is making them.) If Server Manager turns up a heavily loaded server and if network utilization seems to be within reasonable **limits**, it's time to consider upgrading the server. There are three sorts of components you may want to upgrade: NICs,

RAM, and disk drives. A.

...is dependent on the availability of an upgrade card. At press time, Apple had announced but not shipped a CPU upgrade for its flagship Workgroup **Server 8550**. To see how some of the upgrade **alternatives** fared, MacUser Labs tested an Apple Workgroup **Server 8550/132** in several configurations. First, we tested the server as shipped from Apple -- with 24 MB of RAM and a 2-GB internal Seagate...

...server is far from an exact science (see the "Server-Upgrade Tests" figure). NICKle and Diming It If you've segmented your Ethernet network to **limit** competition among users for access to network resources, you've probably been frustrated that server access is still slow for some (or all) users. Since...

...to users. Drive-based bottlenecks are not usually the primary cause of server slowdowns, but an underpowered storage system can contribute to sluggishness. Installing a **RAID (redundant array of inexpensive disks)** system -- which combines multiple drives in order to provide one logical disk volume -- can speed up drive I/O by splitting reads and writes across multiple physical surfaces at the same time. Apple ships **RAID** software with all its servers, and we decided to see if this "free" solution could buy us anything. With the original 24 MB of RAM in the server, we added a second 2-GB Seagate drive and configured the server for **RAID 0**, using Apple's AppleRAID software. Since the Workgroup Server 8550 has two SCSI buses -- an external bus that operates at 5 MB per second...

...disappointing. At server loads of 32 and fewer clients, the throughput was less than it was with the baseline system. Unless your main interest in **RAID** is the consolidation of several drives to give you one large volume, there's little benefit in using AppleRAID's **RAID 0** configuration. We decided to raise the stakes by testing a more powerful **RAID** setup, a StreamLogic SledgeHammer 8200 PCI Wide 8-GB disk array. The SledgeHammer consists of a PCI card and an external box containing two 4...

...load, the point at which the baseline system's performance began to taper off. Unlike adding a few extra megabytes of RAM, buying a speedy **RAID** system will cost you a pretty penny: The SledgeHammer sells for \$3,799. Working in the Kitchen Mindful that our test results had been mixed ...

...Our final series of tests, affectionately dubbed "the kitchen sink" by our testing team, involved adding four NICs, 64 MB of RAM, and the StreamLogic **RAID** system. The kitchen-sink test platform fared far better than any other server configuration. Even with 60 clients, NetBench reported no dropped clients. With 36...

...setting and clearing the AppleShare cache) but goes further. The Monitor & Control window's activity pane shows current server utilization, averaged over time, and the **maximum** activity during the period shown. WE USED THE ZIFF-DAVIS server benchmark test, NetBench 5.0, to evaluate several upgrade options on an Apple Workgroup...

...configurations. For example, the server configuration we used for our "kitchen sink" test, in which we added four NICs, extra RAM, and a high-speed **RAID** disk array, can probably support more users than an unenhanced server -- but the exact number will depend on your situation.

15/3,K/14 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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01410320 SUPPLIER NUMBER: 11225851

Sea of change underway for storage solutions. (data protection and storage management) (Special Report)

Interland, Peter J.

LAN Times, v8, n17, p52(4)

Sept 2, 1991

ISSN: 1040-5917

LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

ABSTRACT: Changes in **backup** and **archival** processes include the development of **storage servers** employing hierarchical management expert systems and **automated robotic** stackers and jukeboxes. **Storage** tape dominates the offline **archival** market with quarter inch cartridges holding up to 1.3Gbytes, digital audio tape holding between one and 2Gbytes, and 8mm Exabyte products holding between 2...

...up to 40Gbytes of 'near-line' storage. Array technology gives optimized request management with eight hard drives working with a 32-bit EISA array controller. **Managing** storage requires a dedicated CPU storage **server** automatically **managing storage**. The future ideal is automatic **archival** and **backup** on appropriate media in a distributed system.



File 15:ABI/Inform(R) 1984-2001/Aug 03  
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File 623:Business Week 1985-2001/Jul W5  
(c) 2001 The McGraw-Hill Companies Inc  
File 20:World Reporter 1997-2001/Aug 03  
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Set	Items	Description
S1	136170	(LONG()TERM OR PERMANENT OR ARCHIV? OR MASS) (5N) (STORAGE? - OR MEMORY OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY? (2W) (DISK? ? OR DISC? ?)
S2	70447	(SERVER? OR DATA OR FILE OR FILES) (5N) (BACKUP? OR BACK???(-)UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR SECONDARY)
S3	43369	(COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR CONTROLLED OR MANAG? OR INTEGRAT?) (5N) (PROCESSOR? OR CPU OR - CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI) (3N)- (DATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))
S4	560346	(COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST??? OR INDICAT? OR REGISTER? OR MARK? ? OR MARKED OR MARKING OR - EXAMIN?) (5N) (TIME? OR HOUR?? OR MINUTE? ? OR INTERVAL?) OR TIME(3N) SIGNAL???)
S5	3878934	CAPACIT? OR LIMIT? OR MAXIMUM?
S6	11299	(TAPE? OR CARTRIDGE?) (5N) (COLLECTION? OR LIBRAR? OR CAROUSEL? OR AUTOMATION()SYSTEM?)
S7	422518	ROBOT? OR CYBERNET? OR AUTOMATE?
S8	0	S1(S)S2(S)S3(S)S4(S)S5(S) (S6 OR S7)
S9	0	(S1 OR S2) (S)S3(S)S4(S)S5(S) (S6 OR S7)
S10	4	S1(S)S2(S)S4(S)S5
S11	4	RD (unique items)
S12	17	S1(S)S2(S) (S3 OR S4) (S) (S5 OR S6 OR S7)
S13	13	S12 NOT S11
S14	13	RD (unique items)

11/3,K/1 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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00432163 89-03950

**Irwin Model 5080 Has Twice the Storage of Competitors**

Susco, Kevin

InfoWorld v10n49 PP: 87-88 Dec 5, 1988

ISSN: 0199-6649 JRNL CODE: IFW

ABSTRACT: Irwin Magnetic Systems Inc.'s (Ann Arbor, Michigan) **mass storage** system, Tape **Backup** 5080, stores 80 megabytes of **data** on a single, removable DC 2000 minicartridge. Any Macintosh computer with a Small Computer Systems Interface port and one megabyte of memory can be supported by the 5080 and its accompanying software -- EZ Tape. The 5080's extra **capacity** is its distinguishing feature. Irwin's own tape format is used in the 5080. That format utilizes servo tracks, which is a floppy disk recording technique that writes special **marks** onto the tape at specific **intervals** to tell the read-write head where to look for the data tracks. By using the EZ Tape program, users can: 1. **back up** all **files** from a hard disk, 2. **back up** only changed **files**, 3. restore all files from a tape cartridge, or 4. select particular **files** to **back up** or restore. Irwin's reliability is rated only as satisfactory because using any tape on the 5080, as suggested by the documentation, leads to unreliable...

11/3,K/2 (Item 1 from file: 674)  
DIALOG(R)File 674:Computer News Fulltext  
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062778

**Sybase tackles an IS balancing act**

**Buyer's Guide: Product Review, Adaptive Server 11.5**

**Client/Server Labs test shows DBMS handles quirky workloads**

Byline: Steve Antonoff

Journal: Computerworld Page Number: 88

Publication Date: October 27, 1997

Word Count: 1501 Line Count: 137

**Text:**

... placing orders, but management doesn't want to wait forever for data about what's happening right now - not last night or yesterday. Information replication - **duplicating data** on multiple **servers** - has been the accepted solution. While still supporting this, Sybase Adaptive **Server** attempts to provide an **alternative**: a **server** that can adjust itself to the changing environment. Add parallel processing and a set of well-thought-out and well-implemented graphical tools, and you...

... application be written to make use of parallel processing. Another important feature of Adaptive Server 11.5 is Recovery Fault Isolation. That lets the DBMS **limit** hardware I/O problems to a page rather than to an entire table or database. Once a bad page is marked, the rest of the...

... using the SQL Advantage utility - Sybase's SQL command graphical user interface (GUI). Or it could be a major undertaking using backups. Modern disk technology - **RAID**, mirroring and so forth - can insulate the DBMS from I/O failures. But even with such technology in place, knowing that only a small portion...

... of Adaptive Server, parallel processing and Recovery Fault Isolation weren't used at all. Sybase Central was used to establish LPM objects but, in the **limited** scope of this evaluation, the real-world effects of LPM weren't measured. Installation and Tools Installing Adaptive Server 11.5 from CD-ROM was...

... about nine minutes. Installation time on an eight-CPU, 200-MHz Pentium

Pro server with SCSI2 drives was comparable. The installation routine used one CPU, **indicating** it is single-threaded. The **time** required to install Adaptive Server is comparable to Microsoft Corp.'s SQL Server. A reboot is required to ensure that all installed DLLs are available...Server expected. The first was a setting, the second a disagreement in the parameters specified for a stored procedure. Adaptive Server installed itself with a **maximum** of 10 devices. That seems rather low but was easy to change with the sp...

...configure stored procedure. Increasing the **limit** to 50 devices allowed the script to create all the database devices. Then a discrepancy between the Microsoft sp...

11/3,K/3 (Item 1 from file: 20)  
DIALOG(R)File 20:World Reporter  
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03081633

**Procom to Showcase Full Line of Network- Attach Storage Solutions At  
Networld+Interop '98 in Atlanta; Will Unveil Several New Products**  
BUSINESS WIRE  
October 12, 1998  
JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 705

... and-play to the extreme. The company's other product lines being shown at Networld+Interop include: NetFORCE 1000 NetFORCE 1000 is a revolutionary high- **capacity** , enterprise-class shared storage system. It offers a direct network attach, high performance, high availability and an easy-to-install data-access storage solution for...

... the few AIT arrays and the world's fastest tape backup and recovery system. With a 20 megabyte- per-second data-transfer rate and a **capacity** of 200 gigabytes, this new line of enterprise-class tape products is the perfect backup and restoration solution for corporate data, offering high availability, **capacity** and performance. About Procom Irvine-based Procom Technology manufactures intelligent network storage solutions from CD-ROM and DVD-ROM arrays to **RAID** and tape storage systems, as well as hard-drive upgrades for notebooks, PCs and servers. In particular, Procom is the world's largest manufacturer of...

11/3,K/4 (Item 2 from file: 20)  
DIALOG(R)File 20:World Reporter  
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01225601 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Mobile Computing Trends Foretell Opportunities For Mass Storage Upgrades;  
CMS Peripherals Overcomes Intimidation Factors With Easy to Install,  
Safe, Time-Saver Upgrade Solutions**  
BUSINESS WIRE  
March 24, 1998 11:48  
JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 784

...for cable fractures, misaligned or broken connectors, electrostatic discharge damage, or voiding the manufacturer's warranty. Direct transfer kits simplify and accelerate the copying of **data** to the **replacement** drive. The entire upgrade process takes less than 25 minutes. "We're fully committed to the proposition that notebook computer shipments are reaching critical mass with a serious shortcoming in **mass storage** ," Burke said. "We are already on top of the immediate needs, but more important to our future is all of the innovative ideas that are..."

14/3,K/1 (Item 1 from file: 15)  
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01555458 02-06447

**Redesigning the customer support process for the electronic economy:  
Insights from storage dimensions**

El Sawy, Omar A; Bowles, Gene  
MIS Quarterly v21n4 PP: 457-483 Dec 1997  
ISSN: 0276-7783 JRNL CODE: MIS  
WORD COUNT: 11027

...TEXT: detailed information about the company and its products can be found at [www.storagedimensions.com](http://www.storagedimensions.com).

Storage Dimensions' products fall into three main categories: high-availability **RAID** disk storage systems, high **capacity** tape backup systems, and network **storage management** software for **multi-server** networks. **RAID** ( **Redundant Array of Independent Disks** ) is a fault-tolerant disk subsystem architecture that provides protection against data loss and system interruption and also provides improved data transfer/access rates for large databases. This protection ranges from simply mirroring **data** on **duplicate** drives to breaking **data** into pieces and "striping" it across an array of three or more disks; if one drive goes down, the controller instantly reconstructs the lost data...

14/3,K/2 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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01500293 01-51281

**Capitalizing on I2O innovation**

Shah, Shishir  
Computer Technology Review v17n8 PP: 42-43 Aug 1997  
ISSN: 0278-9647 JRNL CODE: CTN  
WORD COUNT: 1199

...TEXT: very crucial. The bus interface device must be capable of handling all protocol-related issues without any IOP CPU intervention. This will offload the IOP **CPU** from **managing** multiple I/O threads and generate a **maximum** of a single interrupt per I/O. When an I sub 2 O-**RAID** application is designed using these components, selection of an intelligent SCSI processor becomes even more critical. **RAID** applications need to manage the **data** caches, **redundancy**, load-balancing schemes and other **RAID** algorithms which are CPU-intensive.

The first major beneficiary of I sub 2 O may be I sub 2 O-**RAID** applications. Today, RAID vendors...

14/3,K/3 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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00481176 90-06933

**Systems-Managed Storage Migrates to PC LANs**

Brown, Tom  
Computer Technology Review v9n15 PP: 18, 24-26 Dec 1989  
ISSN: 0278-9647 JRNL CODE: CTN

...ABSTRACT: LAN) as a solution to increasingly difficult resource management challenges and skyrocketing data storage requirements. With systems-managed storage, the computer systems themselves coordinate and **automate** **data** **storage** - from data backup and **archival** **storage** to **managing** **multiple** peripheral devices and the total network data

library. Several basic areas are encompassed by system-managed storage. However, there is no true systems-managed storage...

... levels in the systems-managed storage hierarchy: 1. the common logical-level file format and user interface, 2. centralized multiuser backup services, 3. distributed multiuser **backup** services, and 4. system-wide **file** management services. New opportunities will emerge for network users once a systems-managed storage standard has been established.  
...

**14/3,K/4 (Item 1 from file: 674)**  
DIALOG(R)File 674:Computer News Fulltext  
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063078

**Tape storage put to new enterprise uses**  
**Faster technology key to data access**

Byline: Tim Ouellette  
Journal: Computerworld Page Number: 61  
Publication Date: November 10, 1997  
Word Count: 476 Line Count: 44

**Text:**

Tape storage is moving beyond **backup**. Users have long dumped corporate **data** over the wall from disk subsystems into tape archives. But faster technology is giving them a chance to use tape as an integral piece of...

... of volume the Pearl River, N.Y., insurance company deals with: collecting 1.2 billion insurance records per year, maintaining at least 5.5 billion **records** online at any given **time**, holding data anywhere from five to 22 years and handling between 200,000 and 500,000 downloads per month. The company is able to use...

...subsystem. That compares with prices of less than \$20,000 for newer tape systems today. "High-accessibility tape is a solid choice for near-online **storage** applications such as imaging, document **archive**, video and CAD/CAM," said Michael Peterson, president of Strategic Research, in a recent report. According to International Data Corp. in Framingham, **Mass**., **Storage** Technology Corp. has improved high-end 36-track performance with faster controllers, **libraries** and improved **tape** -handling techniques. It also is planning support for Fibre Channel interconnects, which is important for users beginning to build separate, high-speed storage networks outside the corporate network. And IBM's new Magstar MP 3575 **Tape Libraries** promise 2.2M byte/sec. response times for native data or 6.6M byte/sec. for compressed data. The midrange **tape libraries** are targeted at mixed server - Unix and Windows NT - environments in the data center. That's because open systems servers are requiring tape resources as...

**14/3,K/5 (Item 2 from file: 674)**  
DIALOG(R)File 674:Computer News Fulltext  
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042166

**Server searching: a game of break the bottleneck**  
**Buyers Guide**

Byline: Tony Croes and Josh Penrod  
Journal: Network World Page Number: 33  
Publication Date: January 30, 1995  
Word Count: 4491 Line Count: 423

**Text:**

Server seekers take heart. **Limiting** your search for network servers to only those that offer unique tricks to overcome common performance bottlenecks will ease your selection process. Hunting for bottleneck...

... is essentially a market of their own, with selection criteria that is vastly different from PC-based servers. These very high-end servers support a **limited** and often proprietary set of operating systems and uniquely designed processors, and carry price tags in excess of \$500,000. For many users, PC-based...

...on superserver class machines. These servers also have bus architectures designed to maximize concurrency, sophisticated cache designs and numerous fault-tolerant features designed to provide **maximum** server availability. Prevalent high-end features include error checking and correcting (ECC) memory, which maintains the integrity of data in random-access memory and stored on disk; components that can be swapped without bringing down the **server**; intelligent drive controllers; and **redundant** subsystems. High-end **servers** range from \$11,000 to more than \$100,000. Mid-range servers offer high availability, manageability and performance at a more moderate price of between \$4,000 and \$16,000. These servers typically have large storage and memory **capacities**, as well as segmented bus architectures. Support for multiprocessing, ECC memory and other fault-tolerant features often cost more. At the low end, a new...drive array controllers. As with processors, an obvious way to improve drive performance is to use faster drives. In general, with each increase in drive **capacity** comes a corresponding increase in drive performance. In systems with a single disk, this logic is valid. However, the number of disk drives in the...

... 1G-byte or 2G-byte drive, even when the speed of the individual 1G-byte or 2G-byte drive is marginally faster than the smaller **capacity** drives. The results of empirical testing by Compaq's Systems Division back up this contention (see graphic). Almost without exception, Fast SCSI-2 is the...  
... in a bus promoting high levels of concurrency. These controllers typically support more than one disk channel per bus interface and implement support for multiple **Redundant Array of Inexpensive Disks** (**RAID**) levels in hardware. Implementing **RAID** in hardware instead of software removes the burden of parity and striping calculations from the host **CPU** and allows the controller to **manage** the distribution of data writes evenly across the array of drives. Several vendors offer hardware-based **RAID** (see graphic, page 36). There is room for differentiation among disk array controllers from different vendors. Tricord, for example, contends its use of I/O...

... differentiating features. When data from the CPU is destined for a network port instead of a disk, it can cause a slightly different bottleneck and **limit** the number of users that can simultaneously make server requests. In applications where the net is the primary bottleneck - such as file and print services...of fault-tolerant features to look for, including automatic server restart after a system failure, automatic drive monitoring and drive repair, parity checks across internal **data** paths, hot spares and **redundancy**, as well as load balancing and redundancy capabilities across NICs. Having the hardware is only part of the solution. Overall server manageability and availability depends... 23, page 1). Typically, eliminating one bottleneck leads to the creation of another in a different area. You've got to smash each bottleneck until **maximum** performance is achieved. And the support that a vendor offers can be a good source of information in helping to crash the bottlenecks. Croes and...

14/3,K/6 (Item 3 from file: 674)  
DIALOG(R)File 674:Computer News Fulltext  
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040958

Sentinel Systems makes its move into superserver market  
Maximum Strategy, NetFRAME, Compaq also air new servers.  
Byline: Margaret Dornbusch  
Journal: Network World Page Number: 29  
Publication Date: November 21, 1994

## Text:

Start-up Sentinel Systems, Inc. last week announced its foray into the superserver market, while storage company **Maximum** Strategy, Inc. rolled out its first file server. Veteran server companies NetFRAME Systems, Inc. and Compaq Computer Corp. separately beefed up their product lines, as...

... bytes of cache memory, 16M bytes of bus-resident random-access memory expandable to 512M bytes, and a 400M-byte SCSI fixed disk drive. The **redundant** systems process **data** simultaneously, compare results and correct any soft errors automatically. If a hard error is detected, the failing component is taken off-line automatically. **MAXIMUM IMPACT**  
**Maximum** Strategy's new file servers, the ProFile XL and ProFile L, provide Network File System-based file services for computer-aided design and other processing-intensive applications. The ProFile XL provides up to 376G bytes of storage with **RAID** Level 5 protection and an aggregate file transfer rate of 50M bytes/sec. The ProFile XL can be configured with up to four independent network...

... Motorola 68060 CPUs and can access metadata (file identifier information) from cache for up to 60,000 of the most recently accessed files. The second **CPU manages** data storage and retrieval operations, and sets up all high-speed data transfers. Should either CPU fail, the other CPU will take over. The ProFile...

... NetWare networks running multiple NetWare Loadable Modules and Virtual Loadable Modules, but also supports Windows NT, OS/2 and SCO Unix. Compaq: (800) 888-5858; **Maximum** Strategy: (408) 383-1600; NetFRAME: (408) 944-0600; Sentinel Systems: (215) 830-1900.

14/3,K/7 (Item 1 from file: 635)

DIALOG(R)File 635:Business Dateline(R)

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0430471 93-82788

**Storage Dimensions introduces LANStor RAIDMaster RAID 5 software for Netware**

Enos, Randy

Business Wire (San Francisco, CA, US) s1 p1

PUBL DATE: 930913

WORD COUNT: 1,485

DATELINE: Milpitas, CA, US

## TEXT:

...throughput, five to eight times faster array rebuild times, up to 65% lower CPU utilization, and the critical storage management capabilities not available with other **RAID** 5 software products," said Dale Head, Storage Dimensions director of software marketing. "Network managers that choose mirroring for their fault-tolerant storage solution are losing 50% of their total **capacity** to **data redundancy** overhead. By simply installing LANStor RAIDMaster on any group of three or more SCSI drives, network managers can maximize the use of their hardware and increase total user available **capacity** while maintaining fault tolerance."

With the addition of LANStor RAIDMaster RAID 5 software, Storage Dimensions now offers the industry's broadest line of fault-tolerant...

14/3,K/8 (Item 2 from file: 635)

DIALOG(R)File 635:Business Dateline(R)

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0250522 91-74491

**Wang Laboratories Selects Archive Python DAT Drive for VS Product Lines and First ETSA-Compatible System**

Harris, Michael W.; Kennel, Susan  
Business Wire (San Francisco, CA, US) s1 p1  
PUBL DATE: 911105  
WORD COUNT: 476  
DATELINE: Costa Mesa, CA, US

TEXT:

...line manager. "The Archive Python DAT drive performed extremely well in all our tests and we believe it will provide our users with exceptional high-capacity storage capabilities."

The 2 gigabyte Archive Python DAT drive incorporates a compact 3-1/2-inch mechanism in a standard 5-1/4-inch form-factor. The True Computer Grade DAT...

14/3,K/9 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2001 CMP. All rts. reserv.

01021258 CMP ACCESSION NUMBER: NWC19940701S0976  
**Consolidate Your NetWare File Servers** (File Servers)  
Shane R. Yamkowsky  
NETWORK COMPUTING, 1994, n 508 , 141  
PUBLICATION DATE: 940701  
JOURNAL CODE: NWC LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Hands-On

TEXT:

... will make the NDS visible. Hard Drive Questions We added up the current hard drive space on the existing servers, assuming this should be the maximum necessary to start, and then added 50 percent for expansion. Then we thought about how much data protection we wanted on the hard drives. We considered RAID 0, 1, 4 and 5, but focused primarily on RAID 1 (mirroring) and RAID 5 (data and error protection striping). We decided to use RAID 5 since our projected hard drive capacity was about 12 GB. To buy twice as much hard drive and mirror the volumes seemed like a waste of money, considering the low occurrence of hard drive failures and knowing RAID 5 protects us against any single drive failing. We thought the 93 percent usage provided by the Compaq Smart SCSI controller was a much more cost-effective approach. RAID 5 also provides increased performance on reads and writes. The more hard drives you have, the more simultaneous reads and writes you can execute, as...

...but when we started up NetWare, the volume appeared to be corrupted. Recovering from the problem reminded us that to expand a NetWare volume using RAID 5 means you have to destroy the volume, add the new hard drive(s), and then recreate the volume and put the data back. As a result, we decided to buy the maximum number of hard drives (14), giving us 28 GB. Two GB go to data protection, and 1GB goes to the system volume, leaving our users with 25 GB for data. If we need to add any more drives, we will buy a second RAID controller and add drives as a new volume, rather than go through the pain of destroying the current volume and rebuilding it with the additional...

...to be working and we are prepared for expansion. Rev the Engine Next, we had to choose the CPU or "engine" for the superserver. The CPU does three main jobs: It manages client requests to and from the network cards, runs NetWare Loadable Modules (NLMs) and manages input/output (I/O) requests from the hard drive system. You can reduce the CPU's work managing the hard drive system by using a RAID controller with a RISC CPU on-board to do the work instead. Our Compaq controller came with one. In the past, our separate file server...Compaq uninterruptible power supply, an internal modem and Insight Manager from Compaq, which monitors more than 100 different operating parameters and logs them for you.



**Backup Server** When you consolidate, your backup requirements will change, especially if you are running backups from multiple servers that are about to be consolidated. We strongly recommend that you build a small, separate NetWare file server that is only used for backups in essence, a backup server. This eliminates the chance that the backup software will take down your production server, and you can use the backup server to rebuild quickly any production server that goes down. As your network grows above the 10-GB mark, we strongly recommend you consider a tape exchanger for backups. These self-contained units are composed of one or two tape drives, a robotic arm and a tape cartridge holding 12 to 15 tapes. This allows lots of capacity to get backups done without changing tapes manually. The multiple tape drives reduce backup time by doing simultaneous backups, and you can make copies of...

14/3,K/10 (Item 1 from file: 20)  
DIALOG(R)File 20:World Reporter  
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04929911 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**HighGround Systems Provides Removable Storage Management Component of Windows 2000**  
BUSINESS WIRE  
April 12, 1999  
JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 664

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... programming interfaces for managing tape, optical, and CD-ROM robotic libraries, drives and media. It also enables multiple data management applications (e.g. backup/recovery, archive, hierarchical storage management, document imaging) to share the same tape, CD-ROM, or optical library.

With the Windows 2000-based Removable Storage Management service, system administrators will be able to:

-- Increase Windows 2000 scalability and data and application availability through...

14/3,K/11 (Item 2 from file: 20)  
DIALOG(R)File 20:World Reporter  
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03922301 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**MicroNet Launches Genesis, A Flexible, Fibre Channel-Ready RAID Storage Solution**  
BUSINESS WIRE  
January 05, 1999  
JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 1101

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... significantly increase data throughput and ensure non-stop operation in the unlikely event of a RAID controller failure. At the center of Genesis is the microprocessor-based ECU (Enhanced Control Unit), which monitors the unit environment including room temperature, system temperature, voltages, fans and power supplies to ensure that they are within specifically defined parameters...

14/3,K/12 (Item 3 from file: 20)  
DIALOG(R)File 20:World Reporter  
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03093860

**Solid Data Systems Announces The World's Fastest Solid State Storage System; Excellerator Ultra Delivers a Data Access Time of Only 14 Microseconds**

BUSINESS WIRE

October 13, 1998

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1187

... loss. The Data Retention system provides integral battery backup; an on-board disk drive with a separate data path that is independent of the host CPU ; automatic backup control logic; RAIC (redundant array of independent chips); and redundant power supplies. Solid Data Systems backs its exceptional product quality with a one-year return-to-factory warranty and business-hour telephone support. Optional support services are available including...

14/3,K/13 (Item 4 from file: 20)

DIALOG(R)File 20:World Reporter

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01443892 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Cygnnet Introduces First DVD-RAM Jukebox; Cygnnet's Modular Infinidisc Is Now Integrated With Hitachi's DVD-RAM Drive**

BUSINESS WIRE

April 22, 1998 11:29

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 664

...MByte which makes the Infinidisc(TM) the ideal storage solution for applications that have been anxiously awaiting DVD-RAM technology, such as document archival, network server file backup and multimedia storage." The Hitachi GF-1050 is a 5.25-in. half-height DVD-RAM drive with a fast SCSI-2 interface, providing a maximum data transfer rate of 10 MBytes/second. It performs both recording and reading at a sustained transfer rate of 1.38 MBytes/second with an...

... senior director of marketing for optical storage products at Hitachi America, Ltd. "The GF-1050 DVD-RAM, SCSI interface drive is a fully rewritable, high-capacity random access storage technology which, coupled with UDF file format, enables CD/DVD jukeboxes like the Infinidisc(TM) to compete vigorously with optical jukeboxes based...

...third quarter of 1998. Cygnnet Storage Solutions, Inc. is proud to be the choice provider of an increasingly wide array of CD/DVD storage and automated recording solutions, both hardware -- such as CD/DVD-RAM jukeboxes, CD autoloading duplicators, towers, network attached storage devices and network servers -- and supporting storage management...

his full

(FILE 'HOME' ENTERED AT 09:13:45 ON 06 AUG 2001)

FILE 'COMPUAB, COMPUSCIENCE, ELCOM, INFODATA, SOLIDSTATE, CONF' ENTERED  
AT 09:14:05 ON 06 AUG 2001

L1 2030 SEA (LONG TERM OR PERMANENT OR ARCHIV? OR MASS) (5A) (STORAGE?  
OR MEMORY OR MEMORIES) OR RAID# OR REDUNDANT(W)  
ARRAY?(2W) (DISK # OR DISC#)  
L\*\*\* DEL 605 S (SERVER? O R DATA OR FILE OR FILES) (10A) (BACKUP? OR  
BACK?(W)U  
L2 6100 SEA (SERVER? OR DATA OR FILE OR FILES) (10A) (BACKUP? OR  
BACK?(W) UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR  
REPLACEME  
NT? OR SECOND?)  
L3 4385 SEA (COORDINAT? OR CO ORDINAT? OR CONTROL# OR CONTROLLING OR  
CONTROLLED OR MANAG? OR INTEGRAT?) (5A) (PROCESSOR? OR CPU OR  
CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR  
MULTI) (3A) (D  
ATA OR STORAGE OR ELEMENT# OR DRIVE#))  
L4 14605 SEA (COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST?  
OR INDICAT? OR REGISTER? OR MARK? OR EXAMIN?) (5A) (TIME# OR  
HOUR? OR MINUTE? OR INTERVAL?) OR TIME(3A) SIGNAL?  
L5 121672 SEA CAPACIT? OR LIMIT? OR MAXIMUM?  
L6 124 SEA (TAPE? OR CARTRIDGE?) (5A) (LIBRAR? OR COLLECTION? OR  
CAROUSEL? OR AUTOMATION SYSTEM?)  
L7 48343 SEA ROBOT? OR CYBERNET? OR AUTOMATE?  
L8 0 SEA L1 AND L2 AND L3 AND L4 AND L5 AND L6 AND L7  
L9 0 SEA (L1 OR L2) AND L3 AND L4 AND L5 AND (L6 OR L7)  
L10 0 SEA (L1 OR L2) AND L3 AND L4 AND L5  
L11 1 SEA L1 AND L2 AND L4 AND L5  
D L11 BIB,ABS  
L12 8 SEA L1 AND L2 AND (L3 OR L4) AND (L5 OR L6 OR L7)  
L13 7 SEA L12 NOT L11  
L14 4 DUPLICATE REMOVE L13 (3 DUPLICATES REMOVED)  
D L14 BIB,ABS 1-4

FILE HOME

FILE COMPUAB

FILE COVERS 1981 TO 13 Jul 2001 (20010713/ED)

FILE COMPUSCIENCE

FILE LAST UPDATED: 31 JUL 2001 <20010731/UP>

FILE COVERS 1972 TO DATE.

FILE ELCOM

FILE COVERS 1981 TO 13 Jul 2001 (20010713/ED)

FILE INFODATA

FILE LAST UPDATED: 31 JUL 2001 <20010731/UP>

FILE COVERS 1976 TO DATE.

FILE SOLIDSTATE

FILE COVERS 1981 TO 13 Jul 2001 (20010713/ED)

FILE CONF

FILE LAST UPDATED: 03 AUG 2001

<20010803/UP>

FILE COVERS 1976 TO DATE.

=>

L11 ANSWER 1 OF 1 COMPUAB COPYRIGHT 2001 CSA  
 AN 2000:7004 COMPUAB  
 TI Redundant optical storage system using DVD-RAM library  
 DIG PAP IEEE SYMP **MASS STORAGE SYST**  
 AU Tanabe, Takaya; Takayanagi, Makoto; Tatemiti, Hidetoshi; Ura, Tetsuya;  
 Yamamoto, Manabu  
 CS NTT Integrated Information & Energy Systems Lab, Tokyo, Jpn  
 SO (19990000) pp. 80-87. IEEE. PISCATAWAY, NJ, (USA).  
 Meeting Info.: 16th IEEE Symposium on Mass Storage Systems, 7th NASA  
 Goddard Conference on Mass Storage Systems and Technologies-'Information-  
 based Access to Storage: The Foundation of Information Systems'. San  
 Diego, CA, USA. 03/15-03/18/99.  
 DT Book  
 TC Conference  
 FS C  
 LA English  
 AB A Digital virtual Disk (DVD) random access memory (RAM) Redundant Array  
 of  
 Inexpensive Libraries (RAIL) optical storage system has been developed  
 and  
 tested at NTT Integrated Information & Energy Systems Laboratories. The  
 RAIL storage system incorporates multiple DVD libraries that consist of  
 dual DVD-RAM drives. Each DVD library utilizes a single mechanical robot  
 picker for media loading and unloading. The current **capacity** of  
 the single sided and single layered DVD optical media used in that system  
 is 2.6 gigabytes. To increase the reliability of stored data and at the  
 same time to eliminate the need for read after write verification, a  
 process that can double the **recording time**, a  
**RAID 4** algorithm has been implemented in the control unit of the  
 RAIL storage system. Data sent by the host are transferred to a control  
 unit, that stripes data over five data groups plus one parity unit. The  
 striped and parity data are sent to individual libraries and written to  
 DVD media. This system writes and retrieves storage data with a transfer  
 rate of approximate 6 MB/sec, using write and read control methods that  
 minimize data striping overhead. Other performance factors that affect  
 the  
 transfer rates are the striping size and the number of drives used in the  
 RAIL system. Experimental results indicate that stripe sizes of 32 to 64  
 KB are sufficient to achieve high throughput. In addition, the transfer  
 rates showed no further increase when the number of 1 drives exceeded  
 eight. This RAIL optical storage system which offers **data**  
**redundancy** can be used for networked multimedia applications.

=>

L14 ANSWER 1 OF 4 COMPUAB COPYRIGHT 2001 CSA  
AN 2000:10271 COMPUAB  
TI High-speed optical library system using digital versatile disk random access memory  
AU Tanabe, Takaya; Ura, Tetsu; Yamamoto, Manabu  
CS NTT Cyber Space Lab, Tokyo, Jpn  
SO Jpn J Appl Phys Part 1 Regul Pap Short Note Rev Pap, (200000000) vol. 39, no. 2 B, pp. 920-924.  
ISSN: 0021-4922.

DT Journal

FS C

LA English

AB A high-**data-transfer-rate** optical storage system using a **redundant** array of inexpensive libraries (RAIL) has been developed and tested. It incorporates multiple libraries, where each library consists of dual digital versatile disk (DVD) random access memory (RAM) drives and a single **robotic** hand and holds 2.6 GB DVD disks. To increase the reliability of data storage and at the same time to eliminate

the need for read-after-write verification, which doubles the **recording time**, a redundant array of inexpensive drives (RAID) 4 algorithm is implemented in the control unit of the storage system. Data sent by the host is transferred to a control unit, which stripes the data into five data groups plus one parity unit. The striped and parity data is sent to individual libraries and written to

the

DVD disks. This system writes and retrieves data with a transfer rate of approximately 6 MB/s, using write and read control methods that minimize the data striping overhead. This reliable library system can be used for networked multimedia applications.

L14 ANSWER 2 OF 4 COMPUAB COPYRIGHT 2001 CSA DUPLICATE 1

AN 93:13834 COMPUAB

TI Spacecraft **mass storage** optical disk system.  
DIG PAP IEEE SYMP **MASS STORAGE** SYST.

AU Hines, Glenn D.; Jurezyk, Stephen G.; Hodson, Robert F.

CS NASA Langley Research Cent, Hampton, VA, USA

SO (1993) pp. 285-290. IEEE, IEEE SERVICE CENTER, PISCATAWAY, NJ (USA).

Meeting Info.: the 12th IEEE Symposium on Mass Storage Systems. Monterey, CA, USA. 04/26-29/93.

ISBN: 0-8186-3460-X.

DT Book

TC Conference

FS C

LA English

AB **Mass memory** systems based on re-writeable optical disk media are expected to play an important role in meeting the data-system requirements for future NASA space flight missions. NASA has established

a

program to develop a high-performance (high-rate, large-**capacity**) optical disk recorder. An expandable, adaptable system concept is proposed based on disk Drive modules and a modular Controller. Drive performance goals are ten gigabyte **capacity**, 300 megabit per second transfer rate, 10 super(-12) corrected bit error rate, and 150 millisecond access time. This performance is achieved by writing eight data tracks in parallel on both sides of a 14-inch optical disk using two independent heads. System goals are 160 gigabyte **capacity**, 1.2 gigabit per **second data** rate with concurrent I/O, 250

millisecond access time, and two- to five-year operating life on orbit. The system can be configured to meet various applications. This versatility is provided by the Controller. The Controller provides command processing, **multiple drive** synchronization, **data** buffering, basic file **management**, error processing, and status reporting. Technology developments, design concepts, current status including a computer model of the system and a Controller design are presented.

L14 ANSWER 3 OF 4 COMPUAB COPYRIGHT 2001 CSA DUPLICATE 2  
AN 93:11118 COMPUAB  
TI Spaceflight optical disk recorder development.  
PROC SPIE INT SOC OPT ENG.  
AU Jurczyk, Stephen G.; Hines, Glenn D.; Shull, Thomas A.  
CS NASA Langley Research Cent., Hampton, VA, USA  
SO (1993) vol. 1785, pp. 34-44. INT SOC FOR OPTICAL ENGINEERING, BELLINGHAM, WA (USA).  
Meeting Info.: Enabling Technologies for High-Bandwidth Applications.  
Boston, MA, USA. 09/08/1992.  
DT Book  
TC Conference  
FS C  
LA English  
AB **Mass memory** system based on rewriteable optical disk media are expected to play an important role in meeting the data system requirements for future NASA spaceflight missions. NASA has established a program to develop a high performance (high rate, large **capacity**) optical disk recorder focused on use aboard unmanned Earth orbiting platforms. An expandable, adaptable system concept is proposed based on disk drive modules and a modular controller. Drive performance goals are 10 gigabyte **capacity**, 300 megabit per second transfer rate, 10 super(-12) corrected bit error rate, and 150 millisecond access time.

This performance is achieved by writing eight data tracks in parallel on both sides of a 14 inch optical disk using two independent heads. System goals are 160 gigabyte **capacity**, 1.2 gigabits per **second** **data** rate with concurrent I/O, 250 millisecond access time, and two to five year operating life on orbit. The system can be configured to meet various applications. This versatility is provided by the controller.

The controller provides command processing, **multiple drive** synchronization, **data** buffering, basic file **management**, error processing, and status reporting. Technology developments, design concepts, current status including a computer model of the system and a controller breadboard, and future plans for the drive and controller are presented.

L14 ANSWER 4 OF 4 COMPUAB COPYRIGHT 2001 CSA DUPLICATE 3  
AN 82:13569 COMPUAB  
TI **Mass storage** systems and evolution of data center architectures.  
AU Miller, S.W.  
CS SRI Int.  
SO COMPUTER., (1982) vol. 15, no. 7, pp. 16-19.  
DT Journal  
FS C  
LA English  
AB The investment that an enterprise makes in data processing equipment was

once concentrated in the data center. The architecture of that data center

is now changing into what might better be called a collection of cooperating subsystems that encompasses the geographic extent of the enterprise. The typical central data repository in the DP world is the magnetic **tape library**. The general paradigm is that the tape reel is fetched from the repository and mounted on a drive. Then **data** are moved from the tape volumes to **secondary** storage (i.e., disks) for processing. During the last three decades, considering the density of storage on the tape and the speed with which

we

move tape, tape technology has become only a few hundred times better.

The

architectures of information processing systems have been evolving toward a high-speed local network permitting ready communication among multiple hosts, multiple peripheral controllers, and concentrator/**manager processors** for terminals and/or connections to other systems.

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